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TRAFFIC, TRANSIT AND THOROUGHFARE IMPROVEMENTS FOR SAN FRANCISCO

PREPARED FOR THE MAYOR'S ADMINISTRATIVE
TRANSPORTATION PLANNING COUNCIL BY THE
TECHNICAL COMMITTEE OF THE COUNCIL

CITY AND COUNTY OF SAN FRANCISCO

MARCH 1947

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OFFICE OF THE MAYOR
SAN FRANCISCO

March 10, 1947

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The Honorable
The Board of Supervisors
City Hall, San Francisco

Gentlemen:

It is with great pleasure, and with a feeling of deep thanks to those who worked so faithfully to complete the job, that I submit to you officially the report of the Mayor's Administrative Transportation Planning Council, together with recommendations for accomplishment of the objectives set forth therein.

Last week I sent you, for your advance information, copies of the report prepared by the Council's Technical Committee so that you might familiarize yourselves with the basic matters of the program. Since then the Council has been considering the report, and on March 7 the Council submitted to the Mayor its recommendations, copies of which accompany this letter.

To all of us in San Francisco, city officials and otherwise, who have been in frequent differences of opinion regarding policy matters -- here is a challenge, laid down in a report compiled by our municipal government's best authorities on these subjects, in conferences where objective thinking was the atmosphere, and facts the basis of reasoning. These experts have built us the vehicle on which all can travel in one direction, something which all of us must agree the public would like to see.

Specifically, the Council recommends the following matters, which I endorse and submit to you for your consideration and action:

GENERAL OBLIGATION BOND ISSUES

\$29, 250,000 -- including \$14,485,000 for Major Thoroughfares and Streets; \$10,500,000 for the removal of 160 miles of tracks on streets where trackless trolleys or motor coaches are planned to be substituted for streetcars and for the resurfacing of those streets; \$2,736,000 for the installation of a modern, synchronized three-light traffic signal system, and \$1,529,000 for the engineering, administration and contingencies of the above.

\$20,000,000 for the modernization and rehabilitation of the entire Municipal Railway system, including purchases and reconstruction of equipment, tracks, shops and garages and the electrical system in accordance with the modified Newton Plan.

\$2,200,000 for the payment of the outstanding debt to the Market Street Railway, to remove from the Municipal Railway the restrictions on management and operation now imposed by the terms of purchase.

An amount to be determined, for the purchase of the California Street Cable Railroad Company, with the idea of maintaining the line on California Street, from Market to Presidio Avenue.

\$5,000,000 for the establishment of a land purchase revolving fund to create off-street parking facilities in and on the fringe of what the Council describes as the Metropolitan Traffic District.

LEGISLATIVE MATTERS

(In regard to these, I am directing letters to the departments affected, requesting them to have the City Attorney prepare for your Honorable Board drafts of the ordinances or resolutions required, at the earliest possible time.)

Creation of a Metropolitan Traffic District, the boundaries of which would be The Embarcadero, Townsend Street, Division Street, Eleventh Street, Harrison Street, Thirteenth Street, Duboce Avenue, Market Street, Gough Street, Pine Street, Taylor Street, Sacramento Street, Powell Street and Broadway

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Parking time limit of one hour in the Metropolitan Traffic District.

No Stopping restrictions on certain streets within the Metropolitan Traffic District.

Development of the One Way Street system

Prohibition of right or left turns at certain intersections.

Prohibition of left turns only at certain intersections.

Prohibition of horse drawn vehicles in certain areas on weekdays between 7 a.m. and 7 p.m.

Installation of parking meters on certain streets.

Elimination of "bottlenecks" on certain streets.

Elimination of angle parking on certain streets.

Regulation of merchandise deliveries in certain areas where traffic congestion is great.

Requiring off-street delivery facilities in congested areas.

Establishment of the Administrative Transportation Planning Council and its Technical Committee on a permanent basis.

Regarding the date for submitting the proposed bond issues to the public, which is something for your Honorable Board to determine, may I urge that strong consideration be given to a special election by May 15 if possible and not later than June 1. The public, remarkably patient during the war when materials and manpower made many improvements impossible, has been growing less patient in recent months, and deserves satisfaction of its demands in as short a time as possible.

A delay until November, when the ballot will be laden with many other matters, including elections for numerous public offices, will serve only to make our citizens wait for service improvements to which they are entitled now, and have been for a long time.

I realize that there is the cost of a special election for you to consider, but I also emphasize what must also be apparent to you and all other public servants -- that San Francisco is more important than any one of us, and that the citizens who make up San Francisco want things done.

As a means of providing your Honorable Board with all possible assistance in giving early consideration to these proposals, I am writing the departments concerned asking them to take promptly such official action as may be required to expedite the submission of the bond issues to the people.

The Administrative Transportation Planning Council, in its March 7 letter, left open the question of price for purchasing the California Street Cable Railroad Company, so this will have to be negotiated before any real figure can be talked about. I am requesting the Public Utilities Commission to pursue this matter without delay.

In contrast to my earlier remarks contained in my last message regarding the abandonment of cable car lines in the City -- although I must point out that I only could speak about those which are municipally owned -- I would favor the indefinite retention of the line on California Street which runs from Market Street to Presidio Avenue. It has been maintained well, and the extra cars and equipment which would be available from other lines of the same company would enable us to continue that operation for a long time to come.

In closing, may I call attention to the final paragraph of the Introduction to the Technical Committee's report which, on pages 2 and 3, reads as follows:

"Some of the projects recommended here may meet with opposition, narrow though it may be. Probably none will receive unanimous endorsement by every citizen of San Francisco, for among a population as large and as diverse and complex as that of San Francisco there are some persons who are bound to have their toes stepped

on in any advance forward, and there are others who reject the idea of advancing at all, despite the fact that such a do-nothing attitude is tantamount to a retreat. But for the overwhelming majority of San Franciscans who are looking for a way forward, and who are yearning for decisive action, it is felt by the Technical Committee that the program it now recommends will answer, substantially, the present day problems of transportation and traffic."

The main Council describes the Committee's work as "sound achievement," and, with the minor amendments made by the Council, I commend this program to your Honorable Board.

Sincerely,

Roger D. Lapham
Mayor

ADMINISTRATIVE TRANSPORTATION PLANNING COUNCIL

City and County of San Francisco

March 7, 1947

Honorable Roger D. Lapham, Mayor
City and County of San Francisco
Room 200, City Hall
San Francisco, California

Dear Mayor Lapham:

The Administrative Transportation Planning Council, appointed by you on December 20, 1946, submits to you herewith the report on "Traffic, Transit and Thoroughfare Improvements for San Francisco" prepared by the Technical Committee of the Council.

The Administrative Transportation Planning Council wishes to commend to you the constructive, and in our opinion, sound achievement of the Technical Committee in preparing the comprehensive program recommended in this report and in correlating the immediate projects with long-range plans. This report represents a real advance in governmental procedure in San Francisco in that the various departments concerned with the different phases of the transportation problem have worked together and coordinated their efforts to reach a common solution. On such a basis of unanimity substantial progress can be expected. The Administrative Transportation Planning Council cannot too highly laud the results of this first step.

In passing this report on to you for your consideration, the Administrative Transportation Planning Council wishes to make the following, specific comments on particular recommendations made in the report of the Technical Committee:

1. The Administrative Transportation Planning Council recommends that the sum of \$750,000 for the Embarcadero Underpass be withdrawn from the list of projects to be included in Project No. 1, the Major Thoroughfare and Street Program. The Council does not, however, by this action, recommend that this underpass be eliminated from the overall plan of necessary projects, but rather recommends that the financing of this project be undertaken by the State, which has jurisdiction over this important right-of-way.

2. The Council endorses the integration of certain major thoroughfares of the City into the proposed system of State Expressways, as recommended by the Technical Committee on Pages 21 and 22. Administrative action has already been taken to substitute the Panhandle route for the Twin Peaks route in the Expressway system of the State in accordance with the recommendation referred to above.

Hon. Roger D. Lapham
March 7, 1947

Page Two

In connection with the construction of the 13th Street lateral to the Bayshore Freeway it becomes essential that the present Corporation Yard of the Department of Public Works at 11th and Bryant Streets be moved and reconstructed since it lies across the right-of-way of that lateral.

3. The Council's Technical Committee has carefully explored the possibilities and the consequences of retaining cable car service in San Francisco. In reviewing the Committee's findings and the various alternatives recommended, the Council has come to the conclusion that the existing cable car route which is safest to operate and provides the least interference with the flow of traffic should be retained. That would unquestionably be the California Street section of the California Street Cable Railroad Company's system, operating entirely on California Street between Market Street and Presidio Avenue.

This cable car route is in excellent condition, not only as to rolling stock, but as to rails. The system is owned by a private company, however, which has indicated that it will not be able to operate if it is required to pay the same wages now being paid to platform employees of the Municipal Railway, as recently voted by the electorate. If some cable car operation is to be continued in San Francisco, it would be far cheaper to buy the private company's properties for any reasonable amount and operate part of them at a loss than to spend more than \$1,000,000 rehabilitating the Powell Street lines and operate them at a much greater loss.

California Street is quite wide and parallels the flow of traffic to and from the central business district. Cable car operation on it would result in a minimum of interference. All other cable car operations are road blocks on congested streets and their continuation would seriously impair the over-all traffic and transportation program.

The Council believes that by this means a cherished tradition may be perpetuated without the danger and prohibitive cost inherent in the alternate proposal.

The Council recommends deletion from Pages 7 and 51 of the proposed purchase price of \$250,000 for the acquisition of the properties of the California Street Cable Railroad Company, as this amount is considered an unreasonable appraisal.

4. The Council feels that one of the worst abuses of street space in San Francisco is double parking of vehicles, particularly on one-way streets, which are sometimes converted by this practice into mere winding alleys rather than fast moving traffic ways. There appears to be very little point to extending the one-way street program unless immediate measures are taken to correct this situation.

Hon. Roger D. Lapham
March 7, 1947

Page Three

The State Vehicle Code, which prohibits double parking, however, sets a maximum fine of \$50 and while fixing this ceiling, fails to fix a floor. Consequently, for the past several years, the fine has been only \$1, which is almost no deterrent.

This Council earnestly recommends to Municipal Judge Leo A. Cunningham, with whom the decision as to penalty rests, that he increase this nominal fine to \$5 so that violators will be made mindful of their obligations and better use may be made of streets.

It is proposed that such a fine would apply only in case of illegal double parking by a passenger automobile; or illegal double parking by a commercial vehicle where curb space is available in the immediate vicinity. The Police Department recognizes that the law does not require impossibilities and its officers do not issue citations to operators of commercial vehicles who have no alternative to double parking.

This Council is convinced that this heavier fine would be of substantial benefit to the flow of vehicular traffic without interfering with business. It is unthinkable that the personal convenience of the driver of a single vehicle should discommode and delay drivers of scores of other vehicles.

5. The Administrative Transportation Planning Council recognizes that this report and the recommendations contained are but a first step in the program which San Francisco must undertake to bring the transportation facilities up to contemporary standards. The Administrative Transportation Planning Council strongly endorses the recommendation that it and the Technical Committee continue to function as a continuing organization in the City government. The Council urges that approval be given the recommendation that \$200,000 be appropriated in the annual budget of the City Planning Commission for the fiscal year 1947-1948 for the purpose of detailed studies on the long-range problems which the Technical Committee and the Administrative Transportation Planning Council realize must be made.

The Administrative Transportation Planning Council recommends that the earliest practicable date be set for a special bond issue election. It is imperative that work be undertaken on the recommended projects with the utmost dispatch and your Council would not wish to be held accountable for withholding from the public any longer than necessary an opportunity to express its desires in this connection.

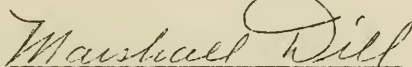
The Council further recommends that every prompt and reasonable means be undertaken to familiarize the public with this program and to provide all citizens with an opportunity to study it

Hon. Roger D. Lapham
March 7, 1947

Page Four

carefully. The Council suggests, as one of these means, the appointment and activation of a representative Citizens' Advisory Committee to participate actively in the presentation and explanation of its various features to the electorate.

Respectfully submitted,

A handwritten signature in cursive script, reading "Marshall Dill". The signature is written in dark ink and is positioned above the printed name.

Marshall Dill

Chairman

ADMINISTRATIVE TRANSPORTATION PLANNING COUNCIL

T R A F F I C, T R A N S I T A N D T H O R O U G H F A R E
I M P R O V E M E N T S
f o r
S A N F R A N C I S C O

A report to the Mayor's Administrative
Transportation Planning Council on traf-
fic and transit improvements, including
projects to be included in proposed
bond issues.

Prepared by the Technical Committee of the Council:

J. H. Turner, Manager of Utilities, Chairman
H. C. Vensano, Director of Public Works
T. J. Kent, Jr., Director of Planning
M. Riordan, Deputy Chief of Police

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THE TECHNICAL COMMITTEE

of the Mayor's Administrative Transportation Planning Council

I. TURNER, *Manager of Utilities, Chairman*

C. VENSANO, *Director of Public Works*

J. KENT, JR., *Director of Planning*

HAEL RIORDAN, *Deputy Chief of Police*

City Hall, San Francisco 2, Calif.

March 1, 1947

To the Administrative
Transportation Planning Council
of the City and County of San Francisco

Gentlemen:

The undersigned members of your Technical Committee respectfully submit the attached report prepared in accordance with (1) your instructions, (2) a letter from Mayor Roger D. Lapham dated December 20, 1946, and (3) the report of the City Planning Commission entitled "Planning for Planning: The Transportation Problem", dated December 12, 1946.

The recommendations contained in the attached report result from a study of all existing plans and reports, ample use having been made of all ideas proposed. Basic plans for mass transportation for the improvement of San Francisco accepted by the majority of earlier expert reports were used. All traffic and transportation designs heretofore advanced were given serious consideration and study and such portions of them as were deemed suitable have been used by your committee together with certain additional features developed as a result of the present study. We believe the resulting recommendations represent an integrated program for the solution of San Francisco's traffic and transit problems.

This report has been unanimously agreed upon by the members of the Technical Committee.

The recommended program is composed of sixteen projects. These projects may be classified as follows:

- 1) Projects requiring financing by general obligation bonds;
- 2) Projects to be financed with current funds of the City departments directly concerned;
- 3) Projects requiring legislative action only; and
- 4) Projects requiring public support and execution.

Your approval of, and the support of others for, all projects advanced in this report is earnestly solicited as each project represents an important part of an overall plan, and

THE TECHNICAL COMMITTEE

of the International Commission for the Protection of the Environment

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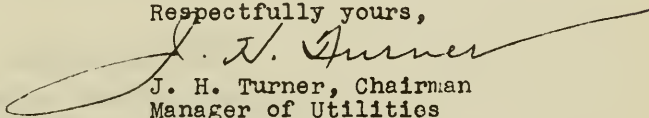
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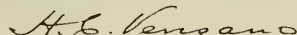
each is necessary to assure the desired overall results. The execution of the full program herein recommended, your Committee feels, will provide a substantial solution to the transportation and traffic problems confronting San Francisco today.

The Technical Committee has signed and submits this report over the titles of their administrative positions with the City and County of San Francisco. It must be borne in mind, however, that this Committee is composed of Consulting Civil Engineers, a Consulting City Planner and a Traffic Expert. Each has given freely of his technical experience, background, and knowledge in the preparation of this report. Mention should be made, too, of the work contributed by the staffs of their respective departments, without which the report could not have been prepared by this time.

Respectfully yours,




J. H. Turner, Chairman
Manager of Utilities




H. C. Vensano

H. C. Vensano
Director of Public Works



T. J. Kent, Jr.
Director of Planning



M. Riordan
Deputy Chief of Police

ADMINISTRATIVE TRANSPORTATION PLANNING COUNCIL

Marshall Dill, Chairman

PUBLIC UTILITIES COMMISSION

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Edward V. Mills

CHIEF ADMINISTRATIVE OFFICER

Thomas A. Brooks

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INTRODUCTION: THE PURPOSE OF THIS REPORT

No bombs fell on San Francisco during the war, no buildings were destroyed by military action, no transport lines were put out of service, yet San Francisco did not survive the war unscathed. Its houses bulged with those persons who came here--increasing its population by thirty percent--to help it build and repair ships and to help it direct and handle the supplying of armies and navies. It had applied all its energy to the common cause of freedom. And then, the job accomplished, San Francisco faced a problem of readjustment.

The difficulties of the problem were aggravated by the fact that during the decade preceding the war, improvement of the City's traffic arteries did not keep pace with the astounding increase which took place in the use of automobiles and trucks during that period. During the same years the privately owned street railways not only failed to improve their tracks and equipment, but actually permitted them to deteriorate to the point where the service rendered became abominable and street pavements between and adjacent to the tracks were practically destroyed. These conditions were the direct and inevitable result of the City's policy, during the 30's, to avoid any capital expenditure for street improvements and to adhere blindly to the 5¢ streetcar fare long after the time when decent and modern service could be provided for that price.

During the war San Francisco was unable to keep its physical facilities in a state of repair. Maintenance was reduced to an absolute minimum: enough only to keep the City functioning as the major port of supply for the Pacific war. All other purposes were subordinated and the City, in effect, took a beating. The traffic on its streets grew heavier, and its chuckholes became deeper. Its transit equipment, already ripe for replacement before the war, served double duty through the war years. Its traffic problem was perplexing before the war, but with a population increase that remained as a permanent increase the problem after VJ Day was, on the surface at least, seemingly insurmountable.

The Technical Committee of the Mayor's Administrative Transportation Planning Council, representing the official departments of the City government most directly concerned with the transportation problem confronting San Francisco, offers in this report its recommendations for an immediate program to break the transportation bottleneck which threatens to strangle San Francisco if decisive action is not soon taken.

Transportation is not the only problem confronting San Francisco but it is a major problem, a far-reaching problem with consequences which affect the daily lives of every person living or

working or doing business in San Francisco. As such it demands a far-reaching solution, and it is with that goal before it that the Technical Committee offers its appraisal of the problem and its recommended course of immediate action.

What San Francisco does today to remedy its transportation problem either will be greatly appreciated or disdainfully deprecated by San Franciscans yet unborn, depending upon the degree of wisdom with which the City now acts. For San Franciscans today are in a moment in the development of their City in which they can determine the pattern of the City for the next 100 years just as irrevocably as did Jean Viegut, and Jasper O'Farrell after him, when they laid down the straight and narrow grid of streets which characterize San Francisco today, 100 years after their unhandiwork.

With this civic responsibility ever in mind, the Technical Committee has pursued its studies with the fundamental idea of recommending no projects which would jeopardize or conflict with long-range plans for future development. Since it is clearly impossible to do everything that needs to be done at once, the Committee felt that its immediate task was to develop and select those projects which it deemed most worthy of earliest execution.

The recommendations here submitted are not intended to constitute in themselves a Master Plan of Transportation, and they should not be so interpreted. Rather, they are based upon the Master Plan of Transportation, adopted by the City Planning Commission in December 1945, and do not in any way prejudice the advancement of its larger long-range features.

The immediate transportation problem which the several operating departments have the urgent responsibility to solve requires the prompt execution of war-deferred capital improvement projects and maintenance projects. The need which the Technical Committee was directed to fill in this city-wide program was for a correlation of these various projects--to each other, and to the long-range developments which will be undertaken later. This the Technical Committee did: it examined each project one by one and considered the interrelationships of each project in terms of the long-range ultimate solutions. Some conflicts were found and these were eliminated. In some cases this necessitated alterations in the projects; in others it involved the natural alteration of details in the general plan to meet practical difficulties which came to light in the course of this study.

Some of the projects recommended here may meet with opposition, narrow though it may be. Probably none will receive unanimous endorsement by every citizen of San Francisco, for among a population as large and as diverse and complex as that of San Francisco there are some persons who are bound to have their toes

stepped on in any advance forward, and there are others who reject the idea of advancing at all, despite the fact that such a do-nothing attitude is tantamount to a retreat. But for the overwhelming majority of San Franciscans who are looking for a way forward, and who are yearning for decisive action, it is felt by the Technical Committee that the program it now recommends will answer, substantially, the present day problems of transportation and traffic.

THE AUTHORITY FOR THIS REPORT

After a consideration of the methods best calculated to solve the transportation problem of San Francisco, the City Planning Commission prepared a report, entitled "Planning for Planning: The Transportation Problem", in which it stated its conclusions. The report was transmitted to Mayor Roger D. Lapham by the President of the Commission on December 18, 1946. In the letter of transmittal he stated that:

"It is the opinion of the City Planning Commission that the problem demands a coordinated approach if lasting remedies are to be obtained. Plans for mass transit must be related to plans for freeways; plans for extending pedestrian facilities must be made in conjunction with plans for off-street parking and delivery facilities; plans for improved traffic conditions on the streets must be related to all the above aspects of the overall problem. The Planning Commission therefore strongly urges that the transportation projects to be included in the forthcoming bond issue be carefully coordinated as parts of the overall program. It is believed that only in this way can unanimous support be obtained from the City departments directly concerned with one phase or another of the problem."

Following a preliminary conference Mayor Lapham addressed a letter, dated December 20, 1946, to the Public Utilities Commission, the City Planning Commission, the Police Commission, and the Chief Administrative Officer of the City and County of San Francisco, in which he asked these officials for their full and earnest cooperation in following the recommendations of the Planning Commission in the above mentioned report "in order that definite recommendations having the support of all of you may be submitted to me as promptly as possible".

Pursuant to the Mayor's letter a meeting of the chairmen of the three commissions and the Chief Administrative Officer was held. At that meeting it was determined that the Technical Committee making this report should be formed and immediately study this problem on a coordinated basis.

In accordance with instructions contained in the Mayor's letter and with verbal instructions to the Technical Committee by the Administrative Transportation Planning Council formed at the Mayor's request, the Technical Committee met on December 31, 1946 and agreed upon the following policy and procedure:

"The Technical Committee understands its immediate assignment to consist of the following tasks:

"1. To consider jointly all the transportation projects tentatively proposed for inclusion in the Spring Bond Issues, coordinating each project on its technical merit and in relation to the other projects, to the Master Plan, and to the Newton Transit Plan.

"2. To designate as soon as possible all projects on which there is unanimous agreement among the members of the Technical Committee as to need and type, and to submit them to the ATF Council for further consideration and transmission to the Mayor as a coordinated program of capital improvements having the full support of all the departments represented by the Committee for inclusion as such in the proposed Spring Bond Issues.

"3. To recommend to the ATF Council for further consideration and transmission to the Mayor subsequent steps for further study of the problems arising as a result of this study. This task will include consideration of and recommendations of the proposal made in Part II of the December 12 report of the City Planning Commission to the Mayor on this subject."

This report has been prepared in fulfillment of the immediate assignment of the Technical Committee.

SUMMARY OF RECOMMENDATIONS

The recommendations of the Technical Committee are summarized as follows:

A. MAJOR THOROUGHFARE AND STREET CONSTRUCTION PROJECTS

Project No. 1. Major Thoroughfare and Street Program (Plate No. 3):

1. Embarcadero Underpass at Market Street
2. Market-Portola Freeway
3. 13th Street Lateral to Bayshore Freeway
4. Broadway Tunnel
5. Seventh Street Extension across Market Street
6. Post-Geary connection between Divisadero and Broderick Sts.
7. Bryant Street connection to The Embarcadero
8. Gough Street extension across Market Street
9. Improvement of gore corner at Oak and Market Streets

Total Estimated Cost \$15,235,000

Project No. 2. Track Removal and Street Reconstruction:

Improvement of streets by removal of abandoned street car tracks and complete reconstruction of such streets, as shown on Plate No. 4.

Total Estimated Cost 10,500,000

Project No. 3. New Traffic Signals:

Installation of modern synchronized three-light traffic signals on thoroughfares shown on Plate No. 5.

Total Estimated Cost 2,736,000

Administration, Engineering, Contingencies, etc. for
Projects No. 1, 2, and 3 1,529,000

Total Major Thoroughfare and Street Bond Issue \$30,000,000

B. TRANSIT IMPROVEMENT PROJECTS

Project No. 4. Municipal Railway Rehabilitation (Plates Nos. 6a, b, c.):

Modernization and rehabilitation of entire municipal transit system through replacement or reconstruction of equipment, tracks, shops and garages, and electrical system, in accordance with the modified Newton Plan, to be financed through issuance of general obligation bonds.

Total Estimated Cost \$20,000,000

Project No. 5. Payment of Debt to Market Street Railway Company:

Issuance of general obligation bonds to pay off remaining debt due to the Market Street Railway Company for properties acquired by the City.

Estimated remaining debt due as of June 30, 1947 \$ 2,200,000

Project No. 6. Purchase of California St. Cable Railroad Company:

Enactment of necessary legislation and issuance of general obligation bonds for the acquisition of the operative properties of the California Street Cable Railroad Company.

Estimated maximum cost 250,000

Total Transit Bond Issues \$22,450,000

Project No. 7. Disposition of Cable Car Lines:

Alternate recommendations are made for this project:

- 1) Replace all cable car lines with suitable modern equipment;
- 2) Replace all cable car lines with suitable modern equipment, with the exception of the California Street line, which shall be operated from Market Street to Presidio Avenue;
- 3) Replace all cable car lines with modern equipment with the exception of a combined Powell-Hyde line from Market Street to Fisherman's Wharf operating on Powell, Jackson and Washington and Hyde Streets.

(If the latter proposal is accepted, a bond issue in an amount sufficient to pay for the rehabilitation of tracks, cars and other equipment for this route must be voted.)

C. TRAFFIC ALLEVIATION PROJECTS

Project No. 8. One-Way Street Program:

Enactment of legislation establishing additional one-way streets and amending certain existing one-way street legislation.

Project No. 9. Off-Street Parking Program:

Establishment of additional short-time parking facilities within the Metropolitan Traffic District and long-time facilities on the fringes of this district, the latter located on or provided with mass transit lines. Establishment of a land purchase revolving fund to be used to effect this program.

Total Cost \$ 5,000,000

Project No. 10. No Stopping-No Parking Program:

Enactment of legislation fixing a Metropolitan Traffic District and extending no-stopping and no-parking controls to

most transit streets and vehicular thoroughfares in this district, and fixing certain parking limits.

Project No. 11. Intersection Turning Program:

Enactment of legislation clarifying and amending existing intersection turning regulations.

Project No. 12. Angle Parking:

Elimination of all angle parking, as traffic code permits, where such parking interferes with proper flow of transit and other vehicles.

Project No. 13. Parking Meters:

Installation of parking meters to aid in enforcement of time-limit parking.

Project No. 14. Merchandise Delivery Program:

Enactment of legislation requiring provision for off-street merchandise delivery facilities in certain buildings to be built or undergoing major reconstruction; and establishment by mutual consent of shippers, receivers, and drivers of a time delivery schedule to avoid heaviest traffic congestion.

D. MISCELLANEOUS PROJECTS

Project No. 15. Staggered Working Hours Program:

Establishment of a staggered working hours program, or any partial program which can be brought about through the voluntary action of employers to relieve peak hour congestion.

Project No. 16. Street Lighting Program:

Establishment of a program for the construction of modern street lights in the amount of \$350,000 annually from funds provided in the annual budget, in accordance with the recommendation of the Citizens' Post War Planning Committee.

E. PROGRAM FOR COMPLETION OF TRANSPORTATION PLAN

The Technical Committee recommends that the Administrative Transportation Planning Council and its Technical Committee be established on a permanent basis and that the Technical Committee be instructed (1) to complete all sections of the comprehensive Transportation Plan, and (2) to coordinate all construction programs affecting transportation. It is also recommended that funds be provided in the 1947-48 budget of the City Planning Commission for the employment of consultants in the execution of this program.

SECTION ONE: BASIC ASSUMPTIONS AND PRINCIPLES

I ASSUMPTIONS CONCERNING THE FUTURE OF SAN FRANCISCO

Before it considered in detail and evaluated any of the proposed transportation projects before it, the Technical Committee considered and gave thought to the fundamental premises underlying the reasons for this study and agreed upon the following basic assumptions.

A. Basic Assumptions Concerning the Future Relationships of the City to the Nation and the World.

1. San Francisco is a world city. Situated on the shores of one of the finest natural landlocked harbors of the world, located at the crossroads of Occidental and Oriental civilizations, facing the world's largest ocean on whose shores live three-fifths of the world's population, San Francisco is a city not only of California, or of the United States, or of North America, but of the World. The natural outlook of San Francisco is wide and broad and all-encompassing, and as such demands a similar outlook by its people in their approach to the problems besetting the organization of the facilities of their city.

B. Basic Assumptions Concerning the Future Relationships of the City to the Metropolitan San Francisco Bay Area.

1. As a world city, the official City and County of San Francisco is but the heart and center of a metropolitan area comprising nine counties and some 65 municipalities surrounding the Bay of San Francisco. This San Francisco Bay area is the urban complement to the contiguous agricultural empire of the Great Central Valley of California.

2. The central commercial and administrative core of this large urban and rural complex is centered and concentrated in Downtown San Francisco--the Central Business District. Established commercial subcenters serve different sections of the Bay area in each of the counties, but the dominant nucleus and center of the Bay area and of Northern California is the Central Business District of San Francisco. All roads and all bridges lead to it, and it is here that the greatest number of people in the area, both transient and permanent, daily converge.

3. The San Francisco Bay area is destined to have a trade and industrial expansion as great as any it has yet experienced concurrently with an in-migration estimated by the California Reconstruction and Reemployment Commission to raise the total population to three million persons by 1960. The industrial zones in the area will be developed on the narrow level shelf along the Bay and on shallow tidelands which can be filled in for expansion purposes. Districts where the greatest industrial development can be expected to occur are in Richmond, on the shoals along the Berkeley shoreline, in East Oakland and south-

1. THE HISTORY OF THE UNITED STATES

The history of the United States is a story of a people who have grown from a small colony of English settlers to a great nation of free men and women. The story begins in 1492 when Christopher Columbus discovered the New World. The first English settlers came to the United States in 1607, and the first American Revolution was fought in 1776. The United States has since grown to become one of the most powerful nations in the world.

2. THE FOUNDING OF THE UNITED STATES

The United States was founded by a group of men who believed in the rights of the individual. They were the Founding Fathers, and they wrote the Constitution of the United States. The Constitution is the foundation of the United States government, and it guarantees the rights of all citizens. The Founding Fathers were men of great vision and courage, and they laid the foundation for a great nation.

3. THE GROWTH OF THE UNITED STATES

The United States has grown from a small colony to a great nation. It has expanded its territory to the Pacific Ocean, and it has become a world power. The United States has a rich history of innovation and progress, and it has made many contributions to the world. The United States is a land of opportunity, and it is a land where everyone has a chance to succeed.

The United States is a land of diversity, and it is a land where people of all races and ethnicities can live together in harmony. The United States is a land of freedom, and it is a land where everyone has the right to speak their mind. The United States is a land of hope, and it is a land where everyone has a chance to build a better future. The United States is a great nation, and it is a land where everyone can find a place to call home.

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western Alameda County, along the San Mateo County bayshore, and in the Bayshore, Bayview, and Islais Creek districts within the City and County of San Francisco proper. Vallejo, Napa, Sonoma, and San Rafael to the north, and San Jose, Santa Clara, and Sunnyvale to the south, will be important centers on the industrial periphery of the Bay area.

4. New residential communities will be developed on the surrounding hillsides all around the Bay. The San Francisco Peninsula can be expected to double its residential population in the next twenty years. East Bay residential expansion will extend into the hills and spread south into rapidly developing southern Alameda County. Southern Marin County will continue to develop as a suburban residential area.

5. The major State expressway system will include San Francisco as the terminus of an east-west route, and will carry a north-south route through the City. The local Bay area highway system will consist of major freeways around and across the Bay, tributary to the industrial zones and connecting with interregional and international trade routes. Downtown San Francisco will continue to be the focal terminal point of the system which will link Bay area commercial subcenters with the industrial and residential zones. Major railroads will be confined to the industrial zones around the Bay, and the largest transcontinental freight terminal areas will be on the east side of the Bay where open land is more readily available for such purposes. Primary intra-area mass transit routes will radiate from Downtown San Francisco and secondary routes will link industrial and commercial subcenters with residential communities.

C. Basic Assumptions Concerning the Future of the City Itself

1. The Central Business District, which is the central core of the Bay area, is also the central core of San Francisco, and contributes the largest proportionate share of property tax returns which provide operating funds for the City. This Downtown district will continue to be maintained as the administrative, commercial, financial, and entertainment center of San Francisco and the Bay area, but the need for improved land use in order to serve adequately an increasing metropolitan population dictates an expansion of its present boundaries.

2. The Civic Center on the west will become an integral part of Downtown San Francisco. The area now occupied by the produce market, site of the proposed World Trade Center, on the northeast also will become an integral part of the central district. The southern boundary will be extended southward to Townsend Street, or at least to the Bay Bridge, although the area south of Mission Street will be utilized primarily for wholesale and light industrial activities as distinguished from the retail and administrative characteristics of the area north of Mission Street.

3. Heavy industries will be located primarily south of the Bay Bridge, east and south of Potrero Hill, and on tideland fills north of Hunters Point. Industrial development north of the Bay Bridge will be limited to the level strip along The Embarcadero.

4. The principal light industrial zones will be located south of Market Street, and service industries, to a limited extent, will be located in outlying neighborhoods where commercial community subcenters will be further developed.

5. Multiple-dwelling residential areas of high population density will surround Downtown San Francisco on the north and west and on the hills to the south. Neighborhoods of single-family dwellings will, for the most part, be in the outermost districts of the City and in the other counties of the Bay area.

6. Principal areas of blight within the City, which will be redeveloped and rebuilt to provide housing accommodations of contemporary standards, are in the Western Addition, Chinatown, North Beach, and South of Market districts. Existing areas of mixed industrial, commercial, and residential uses will be re-planned, and residential uses will be abandoned in the South of Market district as this district is vital to the expansion of the Central Business District. (See C-2 above.)

D. Basic Assumptions concerning Technical Transportation Aspects of the Master Plan of San Francisco.

1. The Major thoroughfare pattern of San Francisco will consist of (1) a marginal route along the Bay connecting the northern approach to the City --the Golden Gate Bridge--with the eastern approaches--the Bay Bridges--and the major southern approach--the Bayshore Freeway; (2) routes west and south of the Central Business District to complete a circumferential thoroughfare around this District; (3) routes radiating from the Central Business District to the west, southwest, and south leading to residential communities within the City, and (4) a north-south route from the Golden Gate Bridge to the Peninsula on the western oceanside slope of the City, and an east-west route across the City from the Islais Creek area to the West of Twin Peaks district. These major thoroughfares will be supplemented by secondary thoroughfares which will serve more localized traffic.

2. Unless a good mass public transit system is developed and maintained, business and industry will tend to continue its trend toward dispersal into residential areas, both in the City and in other parts of the Bay area, causing decreased efficiency and increased blight. Outlying districts will therefore be served by express mass transit service linking neighborhood districts with the Central Business District and the industrial zones along the Bay. Greater use of trolley coaches, in lieu of street cars, will be made and street car lines will be removed from major vehicular thoroughfares.

3. Mass transit vehicles (street cars, trolley coaches, and motor buses) will be separated from heavy flows of private vehicular traffic in terminal areas so that some streets will be reserved for almost exclusive transit use in the Central Business District to satisfy the need for additional transit capacity.

4. By separating vehicular and transit traffic, greater capacity will be derived from the more efficient use of existing streets in the Central Business District. An immediate alleviation of the transportation problem can be expected to result from the adoption of such measures.

5. The final solution of the total transportation problem in San Francisco requires grade-separated rights-of-way for transit vehicles in the Downtown district. This will mean a subway system, including a route under Market Street, designed to carry mass transit vehicles.

BASIC ASSUMPTIONS

FOR THE DEVELOPMENT OF SAN FRANCISCO

EXPANDED CENTRAL BUSINESS DISTRICT

INDUSTRIAL AREAS

REDEVELOPMENT AREAS

HILLY AREAS

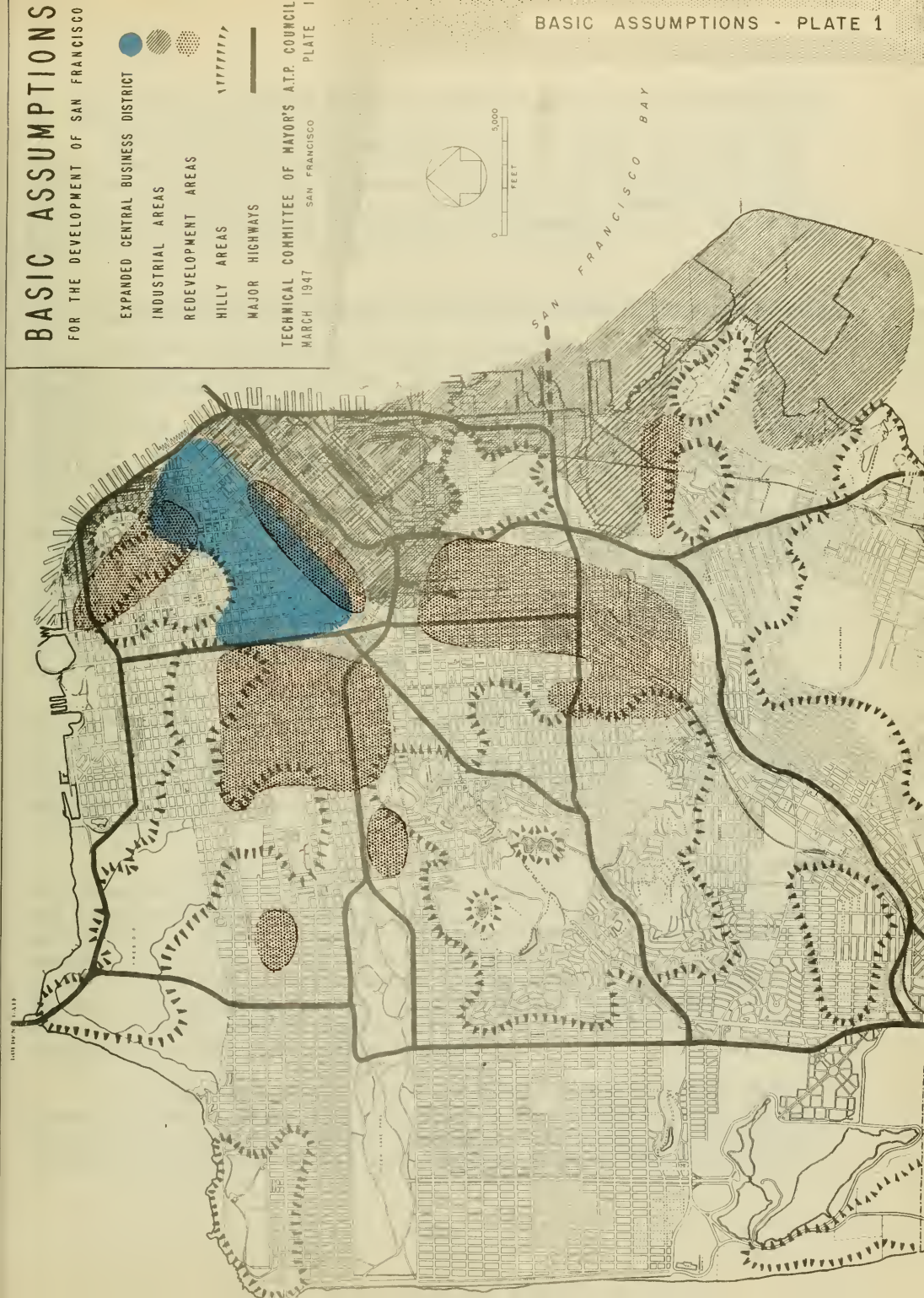
MAJOR HIGHWAYS

TECHNICAL COMMITTEE OF MAYOR'S ATP COUNCIL
MARCH 1947

SAN FRANCISCO

PLATE 1

BASIC ASSUMPTIONS - PLATE 1



II PRINCIPLES OF TRANSPORTATION PLANNING APPLIED TO SAN FRANCISCO

The recommendations embodied in this report are based upon basic planning and transportation principles which the Technical Committee first applied in general terms to San Francisco before considering specific projects. A statement of these fundamental principles is given here to provide an understanding of the reasoning which the general recommendations represent.

A. Principles Concerning the Transportation Pattern in General

Cities of North America are, without exception, plagued today by street systems which fail to fulfill the requirements of modern means of circulation, and San Francisco exhibits this failure to a distressing degree. Laid out before 1870 in terms of the speed and space needs of a relatively small volume of pedestrians and slow-moving horse-drawn vehicles, and without a realistic recognition of the topographic facts of San Francisco life, the gridiron of narrow streets is totally inadequate to accommodate efficiently any one of the diverse types of traffic which chaotically compete for their use today. There is no distinction between the various functions of streets: in the standardized gridiron pattern the 40-mile-an-hour automobile and the 25-mile-an-hour street car and the four-mile-an-hour pedestrian conflict with one another to such an extent that at the heaviest points of congestion, such as Fifth and Market Streets, none can go faster than two miles an hour.

1. There must be, in any salutary endeavor to correct the deficiencies of the design of our present streets, a separation of the various types of traffic--the local transit vehicle from fast through traffic, the moving automobile from the pedestrian, the vehicle seeking access to a building from the vehicle seeking to pass through an area in order to reach a destination several miles distant.

2. The only ultimate long-range solution to the separation of different types of traffic is a new street pattern moulded to the requirements of motorized transport. But, by ameliorative measures, the present inadequate street system can better serve existing traffic to the extent of the maximum obtainable efficiency. One-way streets, modern synchronized traffic signals, on-street parking regulations, and staggered working hours by which the peak hours of congestions would be flattened, all can contribute to this palliative effort.

3. Whenever a major transportation project has been completed to meet a need, its very utility has created new uses and thus a greater need. The San Francisco Bay Bridge, for instance, reached its capacity in ten years rather than in the anticipated

forty years. Therefore, in the location and design of projects full allowance must be made for prospective changes in land use and for the additional traffic which will be induced by the convenience of such new facilities.

B. Principles Concerning the Thoroughfare Pattern

The present pattern of standardized streets diffuses traffic and has tended to make every street a traffic street. Generally there is no real distinction made between local streets which serve principally to give access to the buildings fronting thereon and through streets whose major function would be to provide safe movement from one district of the City to another. Residential neighborhoods have thus been blighted by the resulting indiscriminate mixture of through and local traffic, slow and fast traffic, and parked vehicles and moving vehicles, and the fact that every intersection is a danger point. The gridiron pattern has a frequency of intersections designed for the speeds of animal traction; motorized traffic is thus forced to slow down or stop at so many crossings that a regular unimpeded flow is impossible.

A clear distinction must be adhered to, in solving the transportation problem of San Francisco, between the routes which will serve as major thoroughfares and the routes which will serve as local access streets, and all plans must recognize that distinction. Major thoroughfares can be classified into two categories: main highway routes, and major city streets.

Major Highways

1. Major highways, which serve as primary through routes, provide for the fast but safe movement of heavy streams of traffic into, across, and out of the City possibly by means of limitations on local access, prohibition of parking, separated grades, elimination of left turns crossing opposed traffic flows, and other tested means of increasing vehicular capacity beyond that of an ordinary street.

2. On the routes of heaviest through traffic, freeways designed to accommodate both transit vehicles and private vehicles will be needed. Freeways must be designed to eliminate cross traffic and to accommodate the entrance and exit of vehicles without interference with the main flow of traffic.

Major City Streets

1. Major streets provide for the handling of heavy traffic between the various neighborhoods of the City, linking them with one another, and provide access to the network of limited-access routes. The principles of segregation of different types of traffic requires that some of these streets must be designated for the use primarily of transit vehicles, and others mainly for the use of private vehicles.

2. Major streets differ from routes of primary through traffic only in degree, serving to supplement such routes by simplifying and expediting crosstown and radiating movement of traffic between districts.

3. With through traffic thus concentrated, local access streets are relieved of excessive and conflicting types of traffic and improvements can be made to major streets with an assurance that they will smooth the flow of various types of traffic. The principle of segregation of traffic, applied to major streets, will delimit some streets for transit use, others for private automobiles, and some for primary use by trucks.

4. The fundamental principle of the separation of opposing flows of traffic on heavily traveled thoroughfares requires that all major streets of a width of six lanes be constructed with a central dividing strip wherever physical conditions permit. In central areas of congestion the same principle can be followed on narrow but parallel horse-and-buggy streets three to four hundred feet apart by the establishment of a one-way street system.

5. Points of conflict on major streets must be reduced by channelization, by separation of grades at major intersections, by the construction of tunnels through hills wherever the volume of traffic warrants such measures, by curb parking regulations, by the regulation of sidewalk delivery of merchandise, and by the elimination of curb parking altogether at appropriate times and places.

6. Every vehicular passenger becomes a pedestrian before his final destination is reached and must be provided with adequate sidewalk space, especially in shopping areas. Safety islands, signals, warning signs and similar facilities must be provided where heavy pedestrian movements conflict with vehicular traffic on major streets.

C. Principles Concerning the Transit System

Everyone cannot ride in automobiles to focal points of concentration in urban areas. It is physically impossible. Were everyone who now daily enters the Central Business District to travel by automobile the 11,000 automobiles now entering the district would be increased to 94,000, requiring 55 more Union Square Garages or a vast parking lot twice the size of the entire existing Central Business District. The result would be the diffusion and dispersion of the central core of the City, and the values and advantages which justify its existence and the existence of the City would be destroyed.

1. Thus an efficient system of mass transportation is an absolute necessity. Unless a good transit system is developed and maintained, business and industry will tend to continue its trend toward dispersion into residential areas, both in the City and in other parts of the Bay area, causing decreased efficiency and increased blight.

2. Fundamentally, the overall transportation problem is one of facilitating and expediting the movement of persons and goods rather than one of moving one certain type of vehicle only--the automobile. It is the automobile which, in terms of space, causes what appears on surface examination to be the greatest part of the problem. But public transit affords the greater part of the solution of this overall problem. It cannot do so however, just with rehabilitated horse-and cable-car lines, originally established on a competitive basis.

3. The transit system must be completely modernized with safe, comfortable, and convenient vehicles, routings which reflect the present-day patterns of travel desire, express service linking outlying residential districts directly with the inner business and industrial areas, and rights-of-way organized on the principle of segregation of different types of traffic, thus assuring a free flow of transit vehicles.

The Enlarged Central Business District.

1. Transit vehicles and pedestrians must have precedence over private automobiles in the use of street space in the enlarged Central Business District, the primary terminal area in the City. Adequate circulatory routes around the district must be provided to discourage the movement of vehicles through it.

2. By reserving some streets in the Central Business District for the almost exclusive use of transit vehicles, greater capacity will be immediately derived from existing streets.

3. The riding habit (average yearly number of rides per person) must be increased in order to reduce to a minimum the

The following is a list of the names of the members of the American Medical Association who have died during the year 1918. The names are arranged in alphabetical order. The names of the members who have died during the year 1918 are: [illegible names]

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number of persons who enter by private automobiles and seek parking spaces in the central district of the City, and further, to keep per capita costs of the transit system at a minimum.

4. Express transit routes (those which stop only at transfer points between terminal areas) should operate from or along the fringe of the Central Business District. If such routes operate through the Central Business District they should do so on a separate level from surface traffic, i.e. by means of subways as herein proposed. Express vehicles should utilize the freeway network, or independent rights-of-way, wherever possible.

D. Principles Concerning the Parking of Vehicles

Provision of parking facilities is as necessary and as important as the provision of streets, for every private vehicle must stop at the destination. The location and operation of such facilities should be subject to such controls as are required to protect the general public interest.

1. When street space is limited it must be used for its primary purpose, the movement of vehicles, rather than for the storage of vehicles. Curb parking space accommodates only a small fraction of the automobiles and trucks that require parking facilities and can never be sufficient to meet demands. Because of its detrimental affect upon the movement of vehicles where street surface is limited, curb parking space is the least efficient and most costly parking space which the City can provide.

2. As it is impossible for everyone to enter the central district of the City by automobile, the prime solution of the parking problem within the district will be obtained by the provision of comfortable and convenient transit facilities in order to reduce the number of vehicles requiring parking space to the absolute minimum.

3. Each type of parking facility is useful in particular locations. The appropriate type, as listed below, should be planned in each specific instance.

- a) Curb parking (with and without meters)
- b) Parking lots
- c) Parking structures (above or below ground)
- d) Off-street loading space

4. On streets where curb parking can be tolerated during the day, curb spaces should be reserved for those who wish to park for short periods of time. As a stop-gap measure to increase vehicle turnover, the installation of parking meters is of value, but all net proceeds should be earmarked for the financing of off-street parking facilities.

5. Restricted curb parking is only a compromise with the past. In the future, in all private building to be constructed, having a street frontage of one hundred feet (100') or more, in the Central Business District, the provision for off-street parking and delivery facilities in the building should be mandatory.

6. The use of existing State laws providing for the establishment of "parking districts" should be encouraged. New legislation is also needed to permit the establishment of a Municipal Parking Authority with power to regulate off-street parking, to acquire and lease land for parking use, to encourage the private development of parking facilities, and, where necessary to meet needs not thus served, to construct and operate parking facilities in the public interest.

SECTION TWO: THE COORDINATED PROGRAM

MAJOR THOROUGHFARE PLAN

BASED ON THE MASTER PLAN OF SAN FRANCISCO

MAJOR HIGHWAYS

MAJOR CITY STREETS

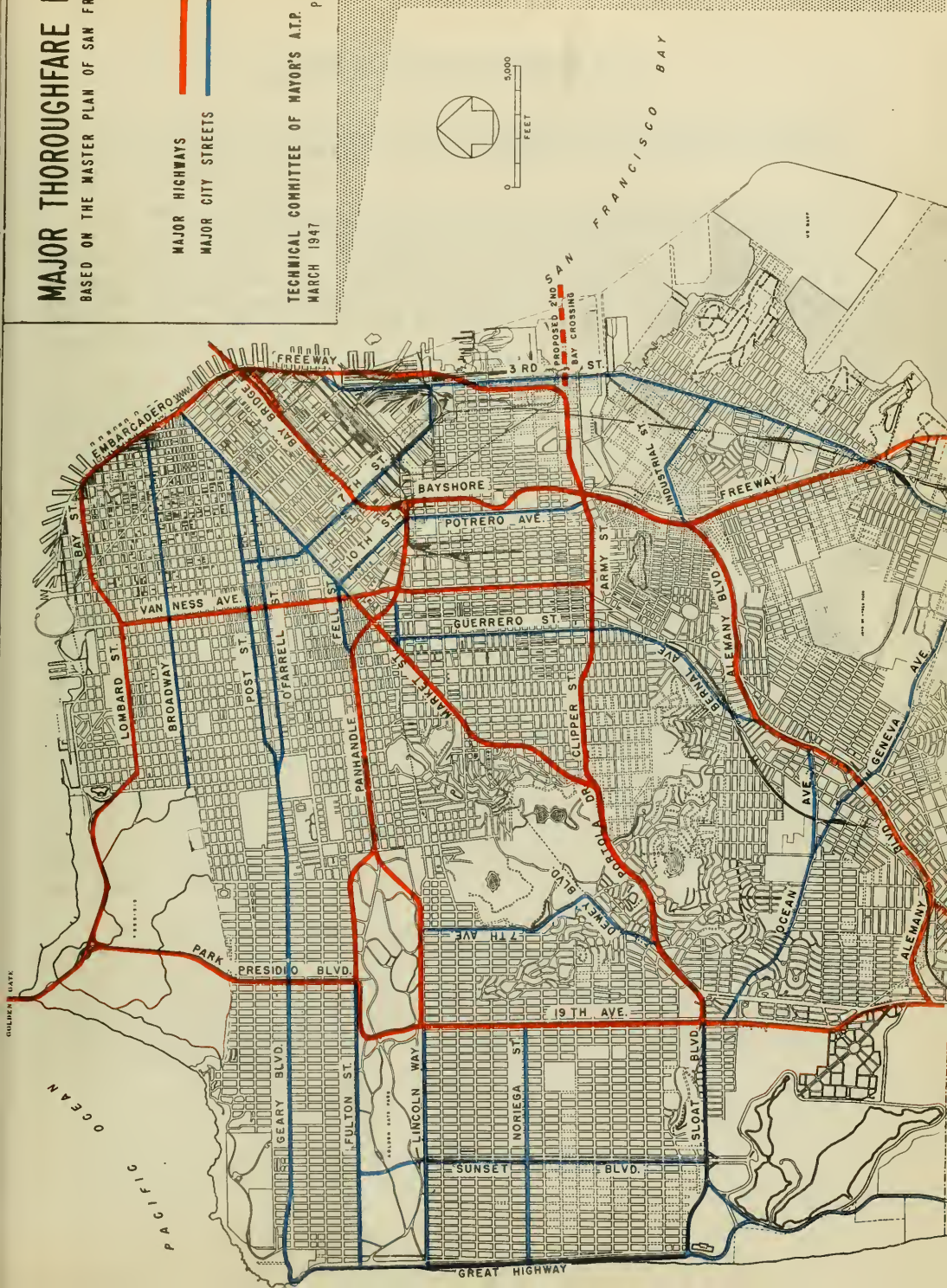
TECHNICAL COMMITTEE OF MAYOR'S A.T.P. COUNCIL
MARCH 1947

PLATE 2

MARCH 1947

MAJOR THOROUGHFARE PLAN

PLATE 2



I THE MAJOR THOROUGHFARE PLAN

A fundamental requisite for the planning and correlation of specific traffic, transit, and thoroughfare projects is a basic major thoroughfare plan.

The Major Thoroughfare Plan, upon which specific immediate project recommendations are made in other parts of this report, is shown on Plate 2. It consists of two elements: major highways, shown in red, which are designated as the desirable routes for the heaviest volumes and types of through traffic; and related major streets, shown in blue, which will serve more localized flows of heavy traffic.

The plan is the result of a careful independent study made by the Technical Committee after taking into consideration present and probable future traffic conditions including the traffic to be introduced by a second Bay crossing. It will be found that it conforms in large measure with the street and highway system embodied in the Master Plan adopted by the City Planning Commission in December, 1945.

Through Traffic Arteries

One of the basic planning and transportation principles considered by the Committee was the need, in this age of motorized transport, of thoroughfares which distinguish between, and separate, different types and modes of transportation. The Major Thoroughfare Plan shows the State Highway Routes within the City as now provided for through traffic. Under legislation now under consideration at Sacramento, funds would be provided for improvement of all of those routes to provide for additional capacity and safety. Such legislation, if adopted, will expedite the completion of the Bayshore Freeway entering the City from San Mateo County, which route is now the most heavily loaded within the City. If the additional funds proposed are made available, all improvements of the State Highway Routes will be carried out by the State Division of Highways using funds derived from an increased gas tax and other licenses and fees.

The legislation now under consideration, as embodied in Senate Bill No. 5, also provides for the incorporation of an additional 7.8 miles of highways into the State Highway System. The Technical Committee is not in complete accord with the particular routes selected for this purpose. It is recommended that the following routes should be made State Highways and financed with State Highway funds:

- 1) Embarcadero Freeway - Bay Bridge approach to Golden Gate Bridge approach;
- 2) Alemany Boulevard - San Jose Avenue to Junipero Serra Boulevard;
- 3) Panhandle Boulevard - Nineteenth Avenue and Park-Prosidio Boulevard to Division Street ramps of Bayshore Freeway.

These routes are shown in red on the Major Thoroughfare Plan.

In order to carry out the above recommendation, it will be necessary to propose that Senate Bill No. 5 be amended by substituting the Panhandle route for the Twin Peaks route, which is now provided for in the present draft of that bill. It is not believed that the Twin Peaks route involving a freeway from Castro Street to Division Street is practicable in view of probable heavy property damage in the area south of Market Street.

Certain portions of the routes shown in red on the Major Thoroughfare Plan are now intended to provide approach facilities to the Second Bay Crossing and should be provided for and financed at the time the major financing for the crossing is arranged.

Necessary as approaches to the second Bay crossing are 1) a connection from the crossing to the Bayshore Freeway at Army Street, and 2) that portion of the Embarcadero Freeway extending from Army Street to the Embarcadero north of the Channel. The Report of the Joint Army-Navy Board on an Additional Crossing of San Francisco Bay, dated January 25, 1947, says of its recommended Army Street site that "a freeway for bringing cross-bay traffic north from Army Street, to and beyond the Southern Pacific and other railroad tracks south of Townsend Street, and dispersing it properly, should be provided."

Van Ness Avenue

Although Van Ness Avenue is shown in red because of the heavy flow of traffic which it carries, the Technical Committee does not recommend freeway construction thereon. Under the immediate program recommended in this report, street cars will be removed from that thoroughfare and will be replaced by curb-loading trolley coaches (see Section II, Part V of this report). Gas tax funds for the installation of progressively synchronized three-light traffic signals are already earmarked for Van Ness Avenue (see Section II, Part III of this report). As Van Ness Avenue naturally serves heavy volumes of intra-City traffic as well as through traffic, two other arterial routes which will serve through traffic now using Van Ness Avenue are recommended.

These routes, as previously mentioned in connection with the State Highway system, are along the Embarcadero and the Panhandle,

the latter, connecting Nineteenth Avenue and Park-Presidio Boulevard, the southern approach to the Golden Gate Bridge, via an extension of The Panhandle across Market Street to a connection with the Bayshore Freeway at Division Street and the Bay Bridge. Combined with the Embarcadero Freeway, the northern area of the City thus would be encircled by major thoroughfares consisting of two arterial routes.

The Central Business District Traffic Loop

Another of the basic principles inherent in the Plan is that private automotive vehicular traffic should not--in fact, cannot--be channeled into the Central Business District or the enlarged central district described in the Basic Assumptions in Section One, Part I of this report. It is obvious that it is utterly impossible to carry major thoroughfares into the center of the district and there terminate them. If this fact is recognized it is apparent that there must be a limit to the approach of such entering arterials. The Technical Committee recommends a loop of major thoroughfares surrounding the enlarged central district at which the approach thoroughfares would terminate. Public transit facilities must be expanded and modernized, as explained in Section I, Part II and Section II, Part V of this report, to accommodate the majority of persons entering the central district. Therefore the major thoroughfares delineated encircle, but do not enter, the expanded Central Business District. However peripheral parking areas must be provided adjacent to the major thoroughfare loop for longer-distance Bay area automotive traffic which originates beyond the reach of an improved transit system, with convenient bus service provided to furnish access from the parking terminals to areas within the central district (see Section II, Part VII of this report.)

Broadway, Van Ness Avenue, Thirteenth Street, Harrison Street, and the Embarcadero to its connection with Broadway are the designated major thoroughfares which the Technical Committee has considered as an arterial encirclement of the district within which the movement of through traffic would be discouraged. Peripheral off-street parking facilities, and, far more important, a greatly improved public transit system, must be provided to discourage the use of automobiles within the district.

An inner circle of parking garages surrounding the existing Central Business District proper should also be provided to accommodate the short-time parking needs of shoppers and others who come from all sections of the Metropolitan Bay area for the shopping, entertainment, and business services which are available in downtown San Francisco. It is the opinion of the Technical Committee that within the Central Business District proper, ultimately no parking of any vehicle other than essential service vehicles will be permitted on the streets, and within the Metropolitan Traffic District (see Section Two, Part VIII of this report) a one-hour maximum parking limit for all vehicles should be immediately put into effect.



The Market Street Problem

The problem of motorized circulation within the central district of San Francisco is greater than in most cities of comparable size for San Francisco has not just one pattern of horse-and-buggy streets, but two patterns which are unrelated to each other although adjoining in the very center of the business district. The problem caused by the joining of the two patterns at Market Street is so great that the term "The Market Street Problem" expresses the transportation problem as a whole in the inner section of the City. Any solution revolves about Market Street. With the accepted assumption of an enlarged central business district extended both north and south of Market Street, it is apparent that the present barrier that is Market Street must be broken.

The Technical Committee is convinced that there is only one solution to this problem - the provision of subsurface routes for transit vehicles in the downtown area. One of the subways would be under Market Street and would thus permit cross-Market automobile, truck and pedestrian traffic to be carried smoothly at the present surface level.

The Committee has given careful consideration to what some refer to as an "alternate solution" - the construction of a system of elevated automobile ways in the downtown area, several of which would cross Market Street - and has reached the conclusion that not only would the cost of such a "solution" be fully as great as the cost of subways in the downtown area, but it would fail completely to provide rapid mass transit since transit vehicles would still be required to make use of the existing gridiron street system. Furthermore, this theoretical "solution" would encourage the increased use of private automobiles in the downtown area which would be directly contrary to universally accepted principles of transportation planning for metropolitan centers.




For these reasons, the thinking of the Technical Committee on the entire transportation problem has been predicated on the assumption that Market Street will in the future have a subway and thus will have transit vehicles removed from its present surface.

Conclusion

It was not the intent of the Technical Committee that the final result envisioned in the Major Thoroughfare Plan would be attained by a single construction program to be completed immediately under this proposed bond issue. Because of the magnitude of the cost, and because of the probable availability of funds from the State over a ten-year period, the work necessary for its completion will be carried out in several stages as conditions permit and require.

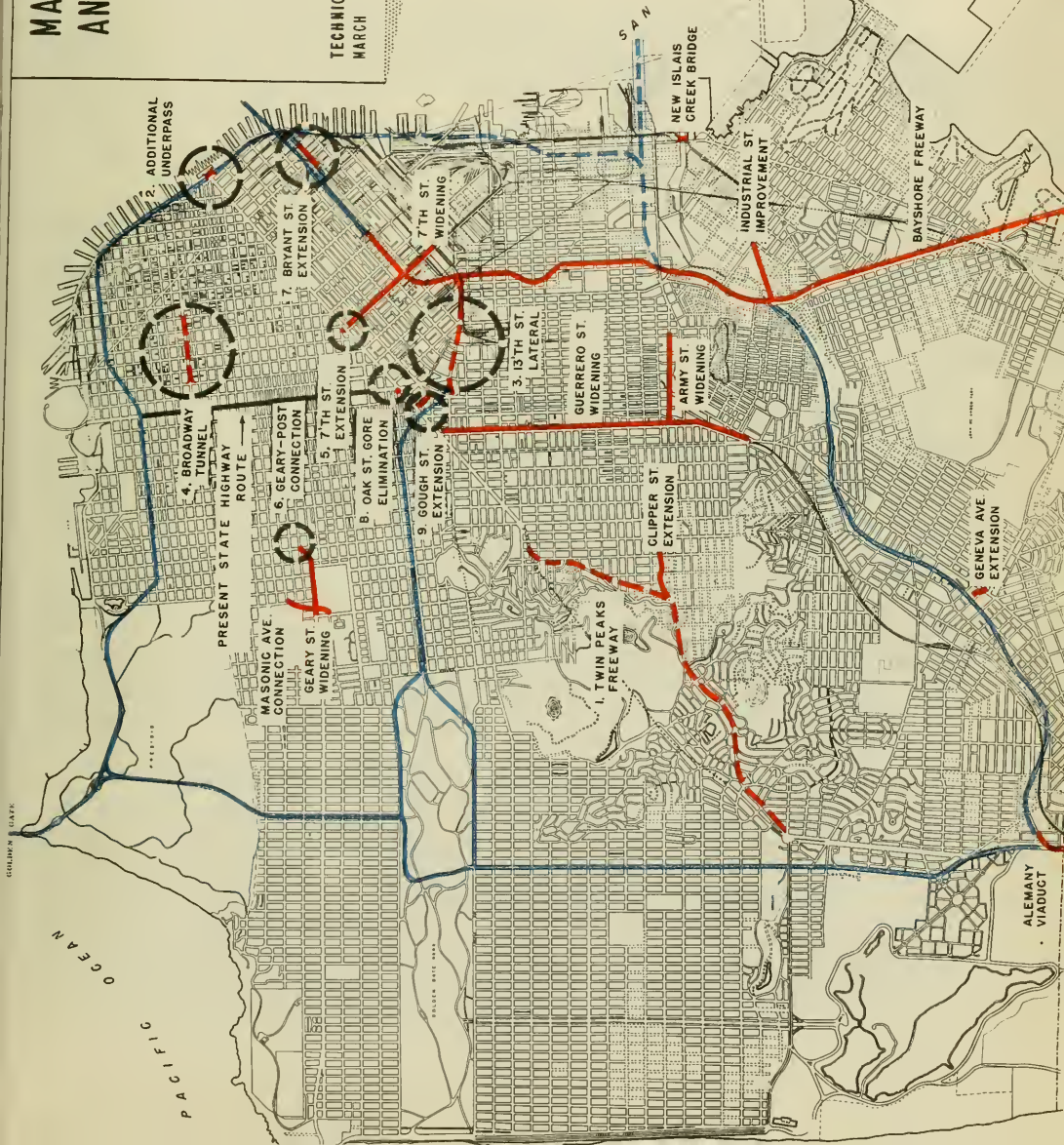
For example, although it is probable that the Panhandle will ultimately be extended and developed as a six-lane arterial, the Technical Committee recommends as the first stage in the development of this route, the designation of Oak and Fell Streets as a pair of one-way streets with synchronized, three-light traffic signals.

MAJOR THOROUGHFARE AND STREET PROJECTS

-  BOND ISSUE PROJECTS
-  CURRENT MAJOR GAS TAX PROJECTS
-  MAJOR PROPOSED STATE EXPRESSWAYS
-  ESSENTIAL 2ND BAY CROSSING APPROACHES

TECHNICAL COMMITTEE OF MAYOR'S A.T.P. COUNCIL
MARCH 1947
SAN FRANCISCO
PLATE 3

MAJOR THOROUGHFARE & STREET PROJECTS - PLATE 3



II MAJOR THOROUGHFARE AND STREET PROGRAM

Project No. 1

Because most of the major highways in the Major Thoroughfare Plan fit logically into the proposed system of State Highways and can thus be constructed or improved with State funds, there is only one major boulevard included in the proposals of the Technical Committee for financing at this time by the City.

Other proposals for construction at this time are for the elimination of important bottlenecks and improvements to major streets so that a smoother flow of traffic will result thereon. The total cost of this phase of the program proposed for bond issue financing is \$15,235,000. A description of the projects, shown in red on Plate 3, follows.

1. Market-Portola Boulevard: \$6,400,000

At present a heavily traveled route links the central district with large and still developing residential districts west and south of Twin Peaks. It is now loaded beyond safe capacity. A large amount of traffic follows other and longer routes, to reach areas better served by this route, because of the delays and hazards which it occasions.

The existing roadway of upper Market Street is narrow, the alignment is poor, and the grades are excessive. The width of the street varies from 70 to 100 feet between property lines so that for a portion of the distance four traffic lanes are available, but in the narrowest and most winding part only two lanes are ordinarily usable. Portola Drive has reasonably satisfactory alignment and grades, but only two lanes are ordinarily available for traffic.

The project proposed by the Technical Committee will provide six lanes for traffic with a dividing center strip. From Castro Street to the vicinity of O'Shaughnessy Boulevard the new thoroughfare will be constructed as a freeway providing a grade-separated, limited-access, high-speed route around Twin Peaks. West of O'Shaughnessy Boulevard the new highway will have two 41-foot roadways and a planted center strip eight feet in width, providing a six-lane, signalized thoroughfare.

2. Embarcadero Underpass at Market Street: \$750,000

The existing two-lane vehicular underpass can no longer handle adequately the traffic at this point. As a part of the Major Thoroughfare Plan to encourage the flow of traffic around the Central Business District, an additional two-lane vehicular underpass on The Embarcadero at Market Street is proposed to relieve the bottleneck existing at this location. This would result in a total underpass capacity of four lanes. This project will be the first stage in the development of the Embarcadero as the ultimate route for the Freeway connecting both existing bridges.

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3. Thirteenth Street Widening, including a Connection with the Bayshore Freeway: \$2,000,000

A lateral to the Bayshore Freeway, this will be an important thoroughfare which will provide a direct link between major streets north and west of Market Street and the Bayshore Freeway and the Bay Bridge. The entire length of Thirteenth Street will be widened on the south side to provide a six-lane roadway. The western terminus of Thirteenth Street at Mission Street will be connected directly with DuPage Avenue which provides a wide and convenient surface route to Market Street. At the eastern end the widening will extend to Harrison Street from which point a new street and ramp will connect with the elevated structure to be built along the northerly side of Division Street by the State Division of Highways as one of the main laterals from the Bayshore Freeway.

4. Broadway Tunnel: \$5,000,000

This will be a four-lane vehicular tunnel under Broadway through Russian Hill. Broadway is one of the few wide streets north of the Central Business District but is now impassable because of the extremely heavy grades on Russian Hill. The tunnel will provide two traffic lanes in each direction, and will thus provide a four-lane major street connection from The Embarcadero to Van Ness Avenue and westward into Pacific Heights. This new route will relieve congestion on Pacific Avenue, breaking the bottleneck existing on that street.

5. Seventh Street Extension Across Market Street: \$375,000

Seventh Street, destined to become a major street of increasing importance in the South of Market district, now has a dead end at Market Street. It is proposed to extend the street diagonally in a northwesterly direction through one block to connect with McAllister and Leavenworth Street. This improvement will provide an additional direct crossing of Market Street and will provide for good dispersal of traffic flows both to the west and north.

6. Diagonal Street from Post Street to Geary Street: \$175,000

This project is designed to break the bottleneck at the Presidio Avenue end of Post Street by cutting a new street diagonally in a southwesterly direction through the block bounded by Post, Divisadero, Geary and Broderick Streets. It will provide a continuous route for traffic on Post Street proceeding westerly via Geary Boulevard. Geary Street is currently being widened west of Broderick Street. Under the principle of separation of different types of traffic applied by the Technical Committee, Geary Street east of Broderick will be designated as a primary transit street, and Post Street will be the private vehicular street. Thus wide Geary Boulevard will in effect split into two thoroughfares at the Broderick Street point where it narrows down into Geary Street. Eventually, when the cable cars are removed from lower O'Farrell Street, it is intended to designate

THE HISTORY OF THE UNITED STATES OF AMERICA

The history of the United States of America is a story of growth and development. It begins with the first settlers who came to the continent in search of a new home. They found a land of vast resources and opportunities, but also one of many challenges. The early years were marked by conflict and struggle, as the settlers fought to establish a new society in a hostile environment. Over time, the United States grew from a small colony into a powerful nation, with a rich and diverse culture. The story of the United States is a testament to the power of the human spirit and the ability of a people to overcome adversity and build a better future.

The United States has a long and proud history of freedom and democracy. From the signing of the Declaration of Independence to the present day, the American people have fought to protect their rights and liberties. The Constitution, the foundation of our government, guarantees the rights of all citizens and ensures the separation of powers between the executive, legislative, and judicial branches. The American dream, the belief that anyone can achieve success through hard work and determination, is a central part of our national identity. The United States has led the world in many ways, from the exploration of new frontiers to the development of new technologies. We have a responsibility to continue to uphold our values and to work for a better world for all.

The United States is a country of many cultures and traditions. Our diversity is one of our greatest strengths, as it allows us to learn from each other and to create a more inclusive society. We have a rich heritage of art, music, and literature that reflects the experiences of our people. The American flag, a symbol of our nation's values, is a source of pride and inspiration for all who love this country. The United States is a land of opportunity, where anyone can start a business, pursue their dreams, and make a difference in the world. We have a responsibility to ensure that everyone has the chance to succeed and to live a life of dignity and respect.

The United States is a country that has made many contributions to the world. From the invention of the automobile to the development of the internet, we have led the way in many areas of science, technology, and innovation. We have a strong military and a commitment to global peace and security. The United States is a country that has a lot to be proud of, and we have a responsibility to continue to make a positive impact on the world. We must work together to address the challenges of the future and to ensure that our values and principles are passed on to the next generation.

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O'Farrell Street from its connection with Geary Boulevard via St. Joseph's Avenue to Market Street as a one-way street east bound, and Post Street from Market Street to its connection to Geary Boulevard at Broderick Street as a one-way street westbound.

7. Bryant Street Connection to The Embarcadero: \$258,000.

This will be a one-way, three-lane, partially elevated roadway running easterly from Second Street to Beale Street and will provide a continuous connection from the various ramps of the Bayshore Freeway (now tentatively planned to be constructed between Fifth and Eighth Streets) to The Embarcadero. This portion of Bryant Street, a major street in the South of Market district, is not cut through at the present time.

8. Improvement of Gore Corner between Oak and Market Streets: \$67,000

As Oak and Fell Streets are planned as one-way streets (see Section II, Part VI of this report) this improvement will provide a better outlet for eastbound traffic on Oak Street turning into South Van Ness Avenue to cross Market Street. The gore will be cut back sufficiently to provide for good alignment with the west line of South Van Ness Avenue, and in addition, Oak Street will be widened for one block between Van Ness Avenue and Franklin Street by setting back the curbs.

9. Gough Street Extension Across Market Street: \$210,000

This improvement will provide a direct connection from Gough Street across Market Street to Otis Street and the widened Thirteenth Street connection to the Bayshore Freeway and the Bay Bridge.

Total Cost of Project No. 1: Major Thoroughfare and Street Bond Issue:

The total cost of the nine projects proposed in this part of the report is \$15,235,000. These projects constitute the major items of construction, in addition to the freeways which the State Division of Highways can be expected to finance, which the Technical Committee considers to be of greatest importance in breaking bottlenecks in existing routes of travel and in smoothing the flow of vehicular traffic within the City, and their financing by general obligation bonds is recommended at this time. Should any of the above projects be finally incorporated into the projected State Expressway system before the proposed bond issue election, the Technical Committee will recommend the substitution of other projects.

CURRENT PROJECTS FINANCED WITH GAS TAX MONIES

In addition to the above recommended projects, the Department of Public Works is currently carrying out projects on the following streets with funds provided from the state gas tax. These projects are shown in black on Plate 3.

ISLAIS CREEK BRIDGE

\$1,000,000

A new 6-lane lift bridge on 3rd Street and Islais Creek to replace the present 30-year old 4-lane bridge which is now a bottleneck in an otherwise 6-lane thoroughfare.

ARMY ST., Harrison to Guerrero

510,000

A physical widening to six lanes. This street will serve as one of the main westerly laterals to the new Bayshore Freeway.

CLIPPER STREET EXTENSION

182,000

The construction of the Clipper Street Extension as a 4-lane arterial extends Army Street to a connection with Portola Drive and the residential districts west of Twin Peaks.

SAN JOSE AVE. and GUERRERO ST., Army Street to Randall St.

658,000

A physical widening to four lanes serving as part of a connection between Market Street and the Bernal Cut, tying into Army Street

GUERRERO ST., Market St. to Army Street

281,000

A 4-lane arterial serving together with the previous item in a northerly-southerly connection from Market St. and the Bernal Cut and intersecting Army Street, thus affording a wide distribution of traffic from the Army Street lateral of the Bayshore Freeway.

INDUSTRIAL ST., Bayshore to Oakdale Ave.

100,000

The first step to provide an easterly lateral to the Bayshore Freeway from Bayshore and Alemany and ultimately connecting to Hunters Pt. via Evans Avenue and either Oakdale or Tolland Aves.

SEVENTH ST., Mission to Townsend St.

106,000

A street widening project to permit smooth flow of traffic from Townsend to Market Street, connecting to the projected new Market Street crossing at 7th Street.

GENEVA AVE. EXTENSION

109,000

Geneva Ave. will be extended from Mission to Alemany thus providing a connection from Third Street to Alemany Blvd. via Geneva Avenue.

ALEMANY VIADUCT at Junipero Serra Blvd.

228,500

A grade separation at the intersection of two important State Highways.

GEARY BLVD., Broderick St. to Masonic Ave.

\$300,000

A physical widening that will improve vehicular traffic in that area by eliminating the Presidio Avenue bottleneck.

MASONIC AVE., Anza St. to Bush St.

20,000

A physical widening and extension of Masonic Ave. to a connection with Bush St.

Policy on Sidewalk Narrowing

The Technical Committee is in general opposed to the narrowing of sidewalks in retail shopping districts, except where incidental to certain specific major projects recommended in this report. However there are certain very short bottlenecks in streets previously widened which should be removed. Specifically, they are: Post Street between Powell and Taylor Streets, a distance of two blocks; California Street between Sansome and Montgomery Streets, a distance of one block; and Third Street between Mission and Market Streets, a distance of one block. It will have been a useless waste of funds to have widened the roadway for the major portions of the length of these streets, and furthermore, as recommended in this report, to provide them with modern synchronized traffic signals, if these minor bottlenecks, where four lanes of traffic must merge into two lanes, are to remain.

Therefore the Technical Committee recommends the narrowing of the sidewalks of these three bottlenecks, comprising four blocks in all, to conform with the work previously performed on the balance of these streets. Current funds are available for this work, if authority is granted by the Board of Supervisors to proceed.

TECHNICAL COMMITTEE OF MAYOR'S A.T.P. COUNCIL
MARCH 1947
SAN FRANCISCO
PLATE 4

STAGE ONE

STAGE TWO

TECHNICAL COMMITTEE OF MAYOR'S A.T.P. COUNCIL
MARCH 1947
SAN FRANCISCO
PLATE 4

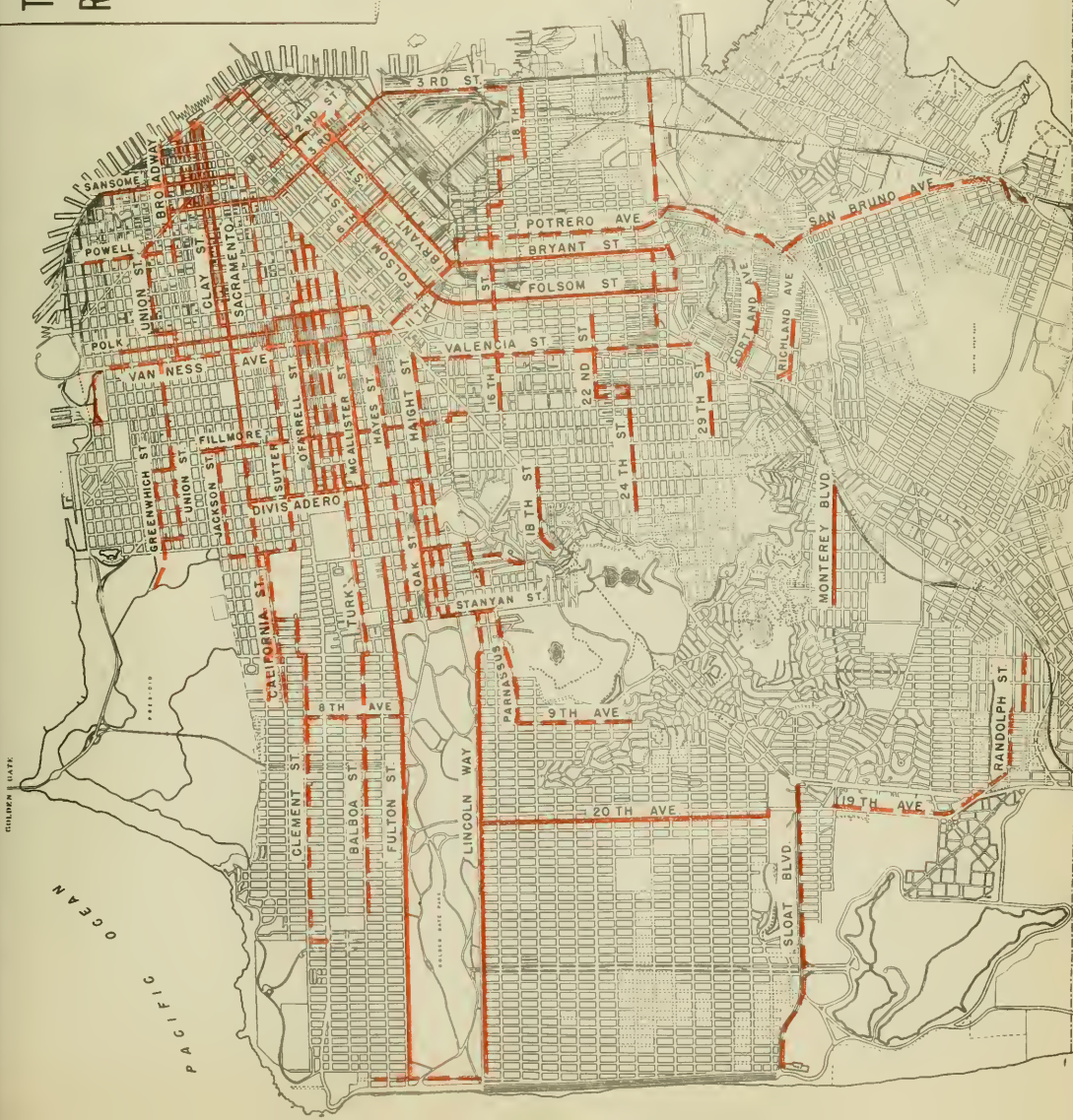
MARCH 1947

TRACK REMOVAL & STREET RECONSTRUCTION-PLATE 4



A vertical scale bar labeled "FEET" with markings at 0 and 5,000.

SAN FRANCISCO BAY



III. TRACK REMOVAL AND STREET RECONSTRUCTION PROGRAM

Project No. 2

Streets occupied by car tracks of the old Market Street Railway are generally in a deplorable condition. During the past ten years under the operation of the Market Street Railway very little major track repair work had been accomplished. Because of the poor condition of these tracks it has not been possible to maintain satisfactory pavements in the roadways. With the acquisition of these lines by the City of San Francisco, it now becomes mandatory that the tracks either be repaired or removed.

Under the overall plan of the Public Utilities Commission it is now proposed to remove approximately 160 miles of single track, replacing street car operation with either motor busses or trackless trolleys.

The Technical Committee believes one of the most important of the alleviating projects it recommends to be the Track Removal and Street Reconstruction Program illustrated on Plate 4. This project provides for the removal of all street car tracks which have been or will be abandoned as a part of the mass transit system of the City and for the reconstruction of the streets involved from curb to curb.

Due to the importance of this work the committee recommends that the cost of the program of track removals be included as a part of the Major Thoroughfare and Street Bond Issue for administration by the Department of Public Works.

Correspondingly, the reconstruction of currently used trackage which is in poor shape is included as a part of the mass transit program, together with the replacing of corresponding streets from curb to curb, and this work is included in proposed Municipal Railway Rehabilitation bond Issue.

PROJECT NO. 2: Track Removal and Street Reconstruction Program

Cost of this project, which is to be financed by general obligation bonds, will be \$10,500,000.

NEW TRAFFIC SIGNAL PLAN

INSTALLATION COMPLETED
OR UNDER WAY

INSTALLATION PROPOSED

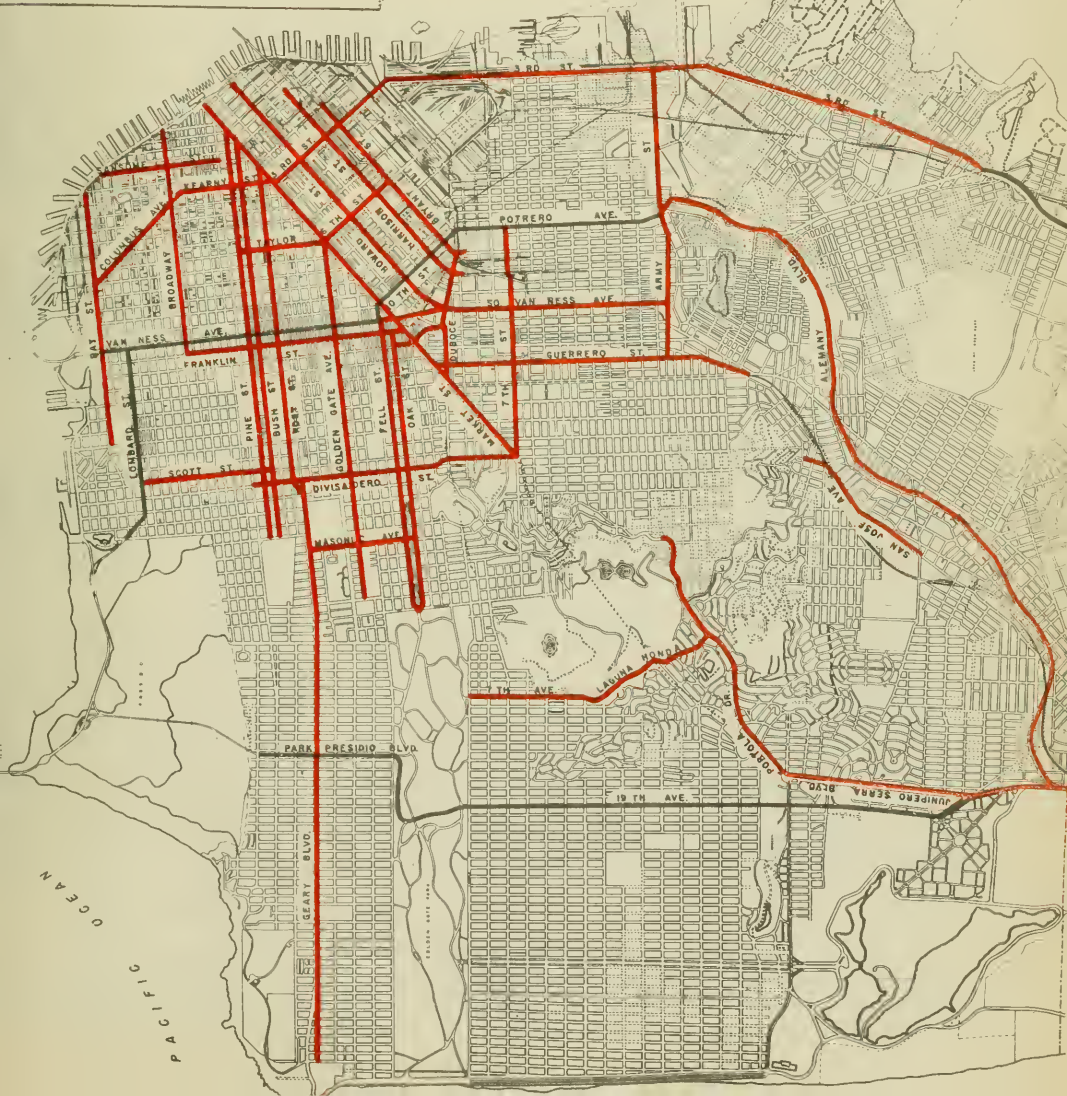
TECHNICAL COMMITTEE OF MAYOR'S A.P. COUNCIL
MARCH 1947

NEW TRAFFIC SIGNAL PLAN PLATE 5



0 5000
FEET

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IV NEW TRAFFIC SIGNAL PROGRAM

Project No. 3

One of the essential characteristics of freeways is that features inherent in their design make unnecessary the provision of traffic signals. But for surface streets which serve as major thoroughfares traffic signals are necessary in order to minimize the conflicts between opposing flows of traffic and to enable traffic to flow unimpeded across intersections.

The Technical Committee recommends the plan shown on Plate 5 to install a comprehensive system of modern three-light traffic signals on some of the major highways and major streets throughout the City. The entire system will cost less than the construction of one mile of freeway but will produce justifiable benefits in proportion to its cost on a city-wide basis, and is thus an important feature in the program for immediate alleviation of the traffic ills of San Francisco.

Such a system will undoubtedly result in an improvement in the orderly movement of traffic, a reduction in time-and-fuel-consuming traffic delays, and a reduction in the total number of accidents. Such a system will be of particular value as a means of control on wide roadways which pedestrians must necessarily cross and where pedestrian accidents are now frequent.

General Plan.

The streets to be signalized are shown on Plate 5. It will be noted that the signals will be located primarily in the Central Business District and on the streets leading into and out of the district. In addition, however, signals are to be provided on the principal circumferential and crosstown thoroughfares, providing for the free movement of traffic between outlying districts.

Portion of System Completed or Under Way.

Plate 5 shows, by a separate color designation, the two State Highway Routes through the City which are already signalized, or which are scheduled for early signal installation through the use of State Highway funds made available for the purpose. The system on Park-Presidio Boulevard and 19th Avenue has been in service as far south as Vicente Street for over a year and the extension of this installation southward is now under way. Signal installation on Lombard Street is also under way and plans are being made for the signalizing of Van Ness Avenue, Tenth Street, and Potrero Avenue.

Type of System Proposed.

It is proposed to install modern type three-light signals similar to those now in operation on 19th Avenue. All signals will be timed in accordance with a flexible progressive system to permit continuous movement of traffic at a designated speed. Signals on

each route will be inter-connected to provide for progressive operation and to permit changes in timing as may be desired.

Replacement of Existing Signals.

The two-light signals, now in operation throughout many parts of the City, were designed and built by Ralph L. Wiley, Chief of the Department of Electricity. They constitute the first system of traffic signals ever invented and installed. They are well constructed and efficiently operated. For many years they served their purpose satisfactorily and still are serviceable for use at isolated locations, or on short streets which carry proportionately lighter volumes of traffic.

It has been found, however, that they are not adaptable to the conditions of heavy traffic on most of the major thoroughfares. The nature of their construction is such that they cannot be synchronized over long routes to allow continuous movement of traffic. Furthermore the use of only two lights, red and green, instead of the standard three lights, red, amber, and green, does not give the degree of traffic control which is required at important street intersections.

As the Wiley type signals are replaced by the installation of the new three-light signals, it is proposed that they be utilized for less important intersections and streets which are not included in the proposed new system, but which will warrant traffic control of the type which the Wiley signals can provide.

Cost of Project.

The cost of the proposed installation, exclusive of the streets on which the installation is complete or under way, is covered by the following project.

Project No. 3: New Traffic Signals.

To provide continuous three-light traffic signals on the streets shown in red on Plate 5 at a total estimated cost, including signals, conduits, cables, controls and complete installation, of \$2,736,000.

THE TRANSIT PLAN

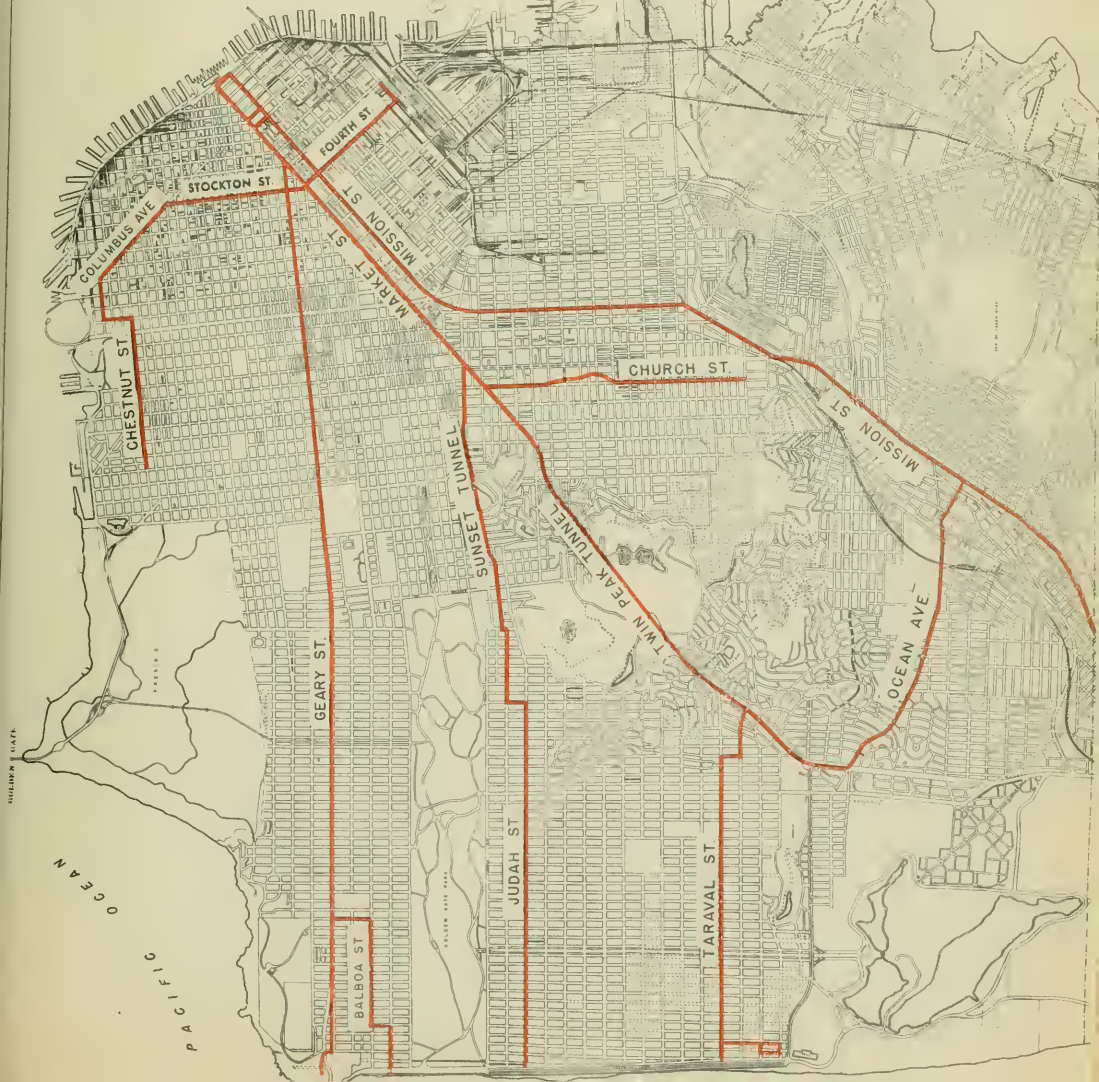
PROPOSED STREET CAR LINES

STREET CAR LINES

TECHNICAL COMMITTEE OF MAYOR'S ATP COM
MARCH 1947
SAN FRANCISCO
PLATE



SAN FRANCISCO BAY



THE TRANSIT PLAN

PROPOSED TROLLEY COACH LINES

TROLLEY COACH LINES

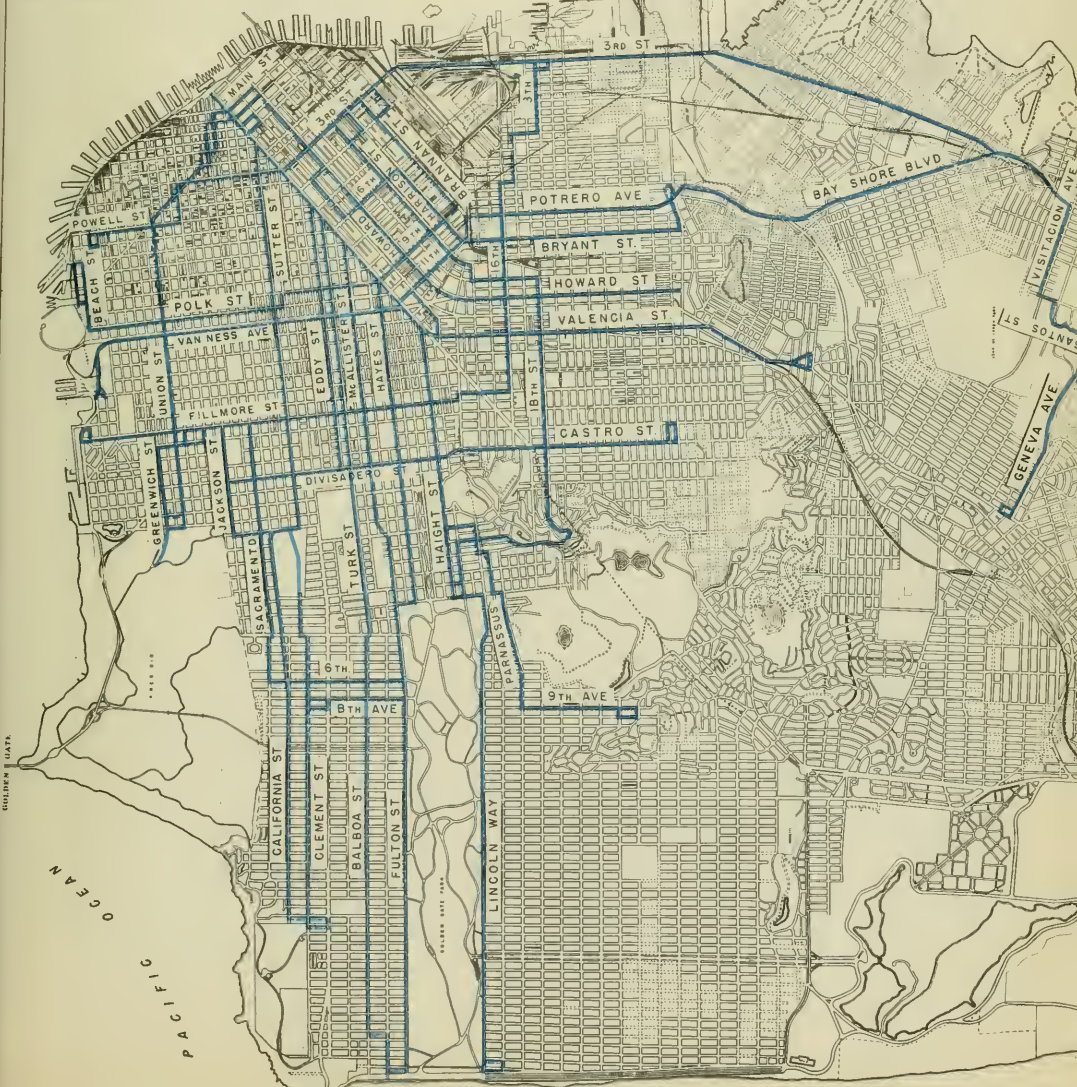
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 MARCH 1947

THE TRANSIT PLAN - TROLLEY COACHES PLATE 6



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SAN FRANCISCO BAY



COURTESY U.S.A.F.

PACIFIC OCEAN

THE TRANSIT PLAN

PROPOSED MOTOR COACH LINES

MOTOR COACH LINES

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MARCH 1947
SAN FRANCISCO

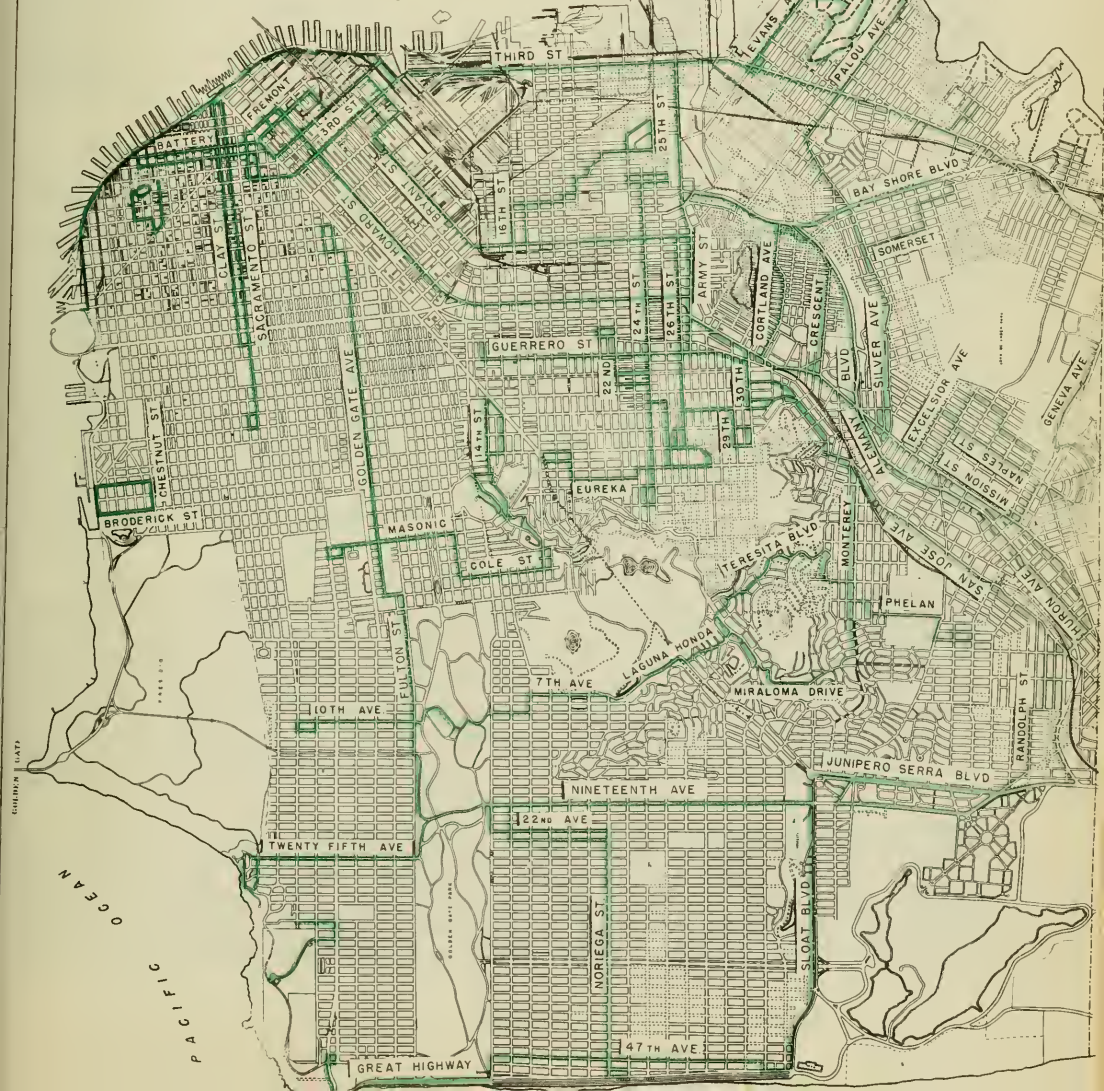
PLATE 6

THE TRANSIT PLAN - MOTOR COACHES PLATE 6C



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FEET

SAN FRANCISCO BAY



V THE TRANSIT PLAN

Projects Nos. 4, 5, 6, and 7

Project No. 4: Municipal Railway Rehabilitation

The Early Transit Pattern

Like its thoroughfare pattern, the transit system of San Francisco is a heritage from the past when conditions which no longer prevail determined its form. For some eighty years the Ferry Building was the major terminus of all transit routes in San Francisco for it was the common focal point of interchange between the peninsula of San Francisco and the areas to the north--Marin and Sonoma--and to the east--the East Bay cities, the Great Central Valley, and the states east of the Sierra Nevada. The Ferry Building was one of the busiest terminals in the world: 55 million persons passed under its tower each year.

Today the Ferry Building is but a ghost of the building which was once the chief gateway of the City and only 2 million persons pass through it annually. The bridging of the Bay has resulted in a dispersal of terminal facilities and has diminished the total proportion of persons who enter and leave the city by public facilities of any sort. The new relative convenience of the automobile which accrued once the physical isolation of the City was broken has changed the travel habits of large segments of the commuting public. Terminal facilities are now dispersed. The Golden Gate Bridge is served by two terminals: the bus depots at Seventh and Mission Streets and at Sacramento and Sansome Streets. The Bay Bridge is served by a train-bus terminal at First and Mission Streets, and by bus depots at Fourth and Market Streets, Fifth and Mission Streets, and Seventh and Mission Streets. Only the long haul train passengers of the Western Pacific and Southern Pacific railroads now use the Ferry Building. No longer is the Ferry Building the natural or logical point for the termination of all transit routes.

Transit service in early San Francisco was provided by many privately owned lines which operated on a competitive basis. The routes of the various companies terminated at the Ferry Building and radiated outward through the central business district to the neighborhoods of population concentration. Expansion of the city over its hills and into the sand dunes was marked by a paralleling and duplication of routes into the new areas. Competition for the transit trade was the motivating factor in the provision of the transit facilities of early San Francisco.

The Municipal Railway of San Francisco was created in 1912 when it acquired and reconstructed the properties of the Geary Street Railroad. The Municipal Railway, motivated by the goal of giving service, expanded into areas hitherto without facilities and contributed to the growth and development of such outlying districts as the Marina, the Sunset, and West of Twin Peaks. Most private lines were

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consolidated under one ownership in 1921, at which time some reconstruction was done. Since then the properties were permitted to depreciate and it was these poorly maintained properties which were incorporated into the Municipal Railway in 1944, leaving only the California Street Cable Railroad Company in private ownership.

The Need for a Bond Issue

Little new equipment has been purchased by the consolidated municipal transit system during the past decade, and normal maintenance repairs to rolling stock and roadbed were of necessity reduced to an absolute minimum by the shortages of manpower and material during the war years. Postwar plans for rehabilitating, reconstructing, and modernizing the now city-wide municipal transit system have been delayed and blocked by continued material shortages and by increased costs and the consequent insufficiency of current revenues. Some improvements have been made, but the complete renovation of the transit system that is necessary if the City is to survive has not been possible.

When the properties of the Market Street Railway were acquired it was realized that they were greatly depreciated and in need of extensive repairs and replacements. To rehabilitate and modernize those properties, to incorporate them fully into the unified municipal transit system, to acquire new vehicles, to make needed changes in the system in accordance with contemporary service requirements, and to take a positive step forward in the establishment of a modern transit system, will require a large sum of money.

Since it is now apparent that such funds must be provided from a source other than the operating revenues of the existing system, it is clear that a bond issue must be resorted to. The improvements in service and the reduction in operating costs that would result from the wise expenditure of such funds fully justify the bond issue as an investment. Such bonds could be retired out of the revenues of the improved system.

Public support for such a bond issue can be expected only if there is a clear and evident demonstration of the principles upon which the plan for transit improvement is based and of the benefits which can be derived from its effectuation.

Basis of the Transit Plan

In April, 1945, a Postwar Transit Plan was prepared by Mr. L. V. Newton, Consulting Engineer, for the Public Utilities Commission which gave specific recommendations for the reconstruction of physical properties and for the use of various forms of transit over routes deemed to serve adequately all sections of the City. The recommendations here submitted by your Technical Committee are based on that plan and are the result of subsequent studies by the Public Utilities Commission, the Department of Public Works, and the City Planning Commission, and by the coordinated consideration given to the plan by the members of your Technical Committee.

Features of the Plan

The plan is characterized by the following salient features:

1. Every change proposed has been coordinated with other elements of the transportation plan. Heavy volumes of transit traffic and heavy volumes of private vehicular traffic will be separated by the use of routes designated for either one purpose or the other.
2. Outlying districts of the City will be linked closer to the central areas by the provision of "express" service in separate vehicles which pass through the inner districts where "local" service is provided.
3. The plan does not conflict with or jeopardize the development of long-range plans involving rapid transit and subways. The plan requires a minimum of construction, necessary in any case, even were it possible to carry out long-range plans immediately.
4. The new routing will make it possible to go from any district of the City to any other with a maximum of one transfer, except from a few outlying hilltop areas which would be served by local shuttle buses, thereby requiring two transfers.
5. The number of lines operating radially to and from the Ferry Building and the lower end of Market Street will be reduced and will be replaced by through routes between areas of commercial and industrial concentration on opposite sides of Market Street.
6. More circumferential routes will be provided, reducing unnecessary trips into, and transfers within, the central business district by persons whose destination is outside that area. These routes will serve as feeders to the radial lines at various distances from the central district as well as connect residential areas directly with industrial areas.
7. A number of bus loop routes will be established within the central area to connect terminals, parking areas and various sub-centers with one another, in order to relieve through lines of local loads. It is expected that the convenience provided by such routes will encourage greater use of the transit system in the central area in place of private vehicles.
8. Track reconstruction has been limited as far as possible to routes which must continue in street car operation for some years. The elimination of street car tracks, with operation converted to trolley bus or motor coach, is proposed in many instances in order to:
 - a) reduce the total number of new street cars required,
 - b) increase the traffic capacity of the streets, and
 - c) improve the speed, flexibility, and safety of the system
9. Where flexibility is required and where express service is planned, new motor coach routes are proposed. Most local feeder

service routes served by motor coach are retained as now operating, and some new ones are proposed. Full use of freeways for express service, as they are constructed, is envisioned.

It is recognized that this plan will be subject to modification of details before it is executed in order to meet situations that may arise, but it is believed that an estimate based upon it will be adequate for the reconstruction and modernization of the existing system, and for the purchase of new rolling stock, and will at the same time allow enough flexibility to meet situations that may develop during the reconstruction period.

Slight deviations from the basic plan will not materially affect the estimate or the over-all result, and little is to be gained by attempting at this time to anticipate all possible revisions in the plan.

Furthermore, an extensive traffic survey, covering San Francisco and the East Bay, is now being conducted by the California Highway Commission, in collaboration with the federal Public Roads Administration. The results of this survey will be available before the plan is put into effect, and will provide comprehensive data on which to base such changes as may seem desirable.

Scope of Bond Issue

Following is an estimate of the proposed bond issue, totaling \$20,000,000, for the rehabilitation of the municipal transit system:

EQUIPMENT

Street cars, multiple unit	55 at	\$31,000	\$1,705,000	
Trolley coaches	361	20,000	7,220,000	
Motor coaches, 40-pass.	32	16,750	536,000	
" " 36-pass.	66	16,000	<u>1,056,000</u>	
				\$10,517,000

WAY AND STRUCTURES

Track reconstruction	26 mi. S	3,365,000	
Trolley coach overhead	164 mi.	2,560,000	
Substations and feeders		1,500,000	
Carhouses, garages, and shops		<u>2,618,000</u>	
Sub-total		10,043,000	
Less existing appropriations		<u>900,000</u>	
Net way and structures			<u>9,143,000</u>
Total road and equipment			\$19,660,000
Removal of abandoned property			<u>340,000</u>
TOTAL BOND ISSUE			\$20,000,000

The above estimate shows that the rehabilitated system will, as at present, operate street cars, trolley coaches, and motor coaches. In a city of the size of San Francisco each of these modes of transportation has its place.

Street Cars

To serve the proposed routes and provide the necessary spare vehicles, it is estimated that 282 electric street cars will be required.

For the present, rather than to invest heavily in street cars, it is advisable to defer the purchase of most of the street cars required and to utilize the best of the cars now in operation. Some of the present cars, especially those purchased or built by the Municipal Railway, although far from modern, are in excellent physical condition, and are capable of rendering good service for many years. It is proposed to keep in service 212 of the best of these cars. This, with the 15 new cars now on hand or on order, will reduce to 55 the number to be purchased at this time.

The routes over which it is proposed to operate street cars are shown on Plate 6a and in the tabulation below. Included here are many of the heavy trunk routes, and other lines on which street cars can be used to advantage. No other form of transportation is at this time practicable through the Twin Peaks and the Sunset Tunnels.

STREET CAR LINES

Route No.	Description	Maximum Cars Scheduled
<u>Electric Lines</u>		
B	Geary	61
F	Stockton	26
J	Church	18
K	Market - Twin Peaks Tunnel - Ocean Ave.	26
L	Market - Twin Peaks - Taraval	31
N	Market - Sunset Tunnel - Judah	31
8	Market - Castro	10
14	Mission - Daly City	38
40	San Mateo	<u>15</u>
	TOTAL SCHEDULED	256
	Spares	<u>26</u>
	Total Required	282
	On hand and on order	<u>227</u>
	Net to be purchased	55

Trolley Coaches

In general, the trolley coach lines to be established through the proposed bond issue will replace existing street car lines. In addition, it is proposed to operate trolley coaches on the Castro-Divisadero bus route, a heavily traveled line with severe grades.

The following tabulation shows the trolley coach routes proposed, and the number of vehicles required to serve them. These routes are also shown on Plate 6b.

TROLLEY COACH LINES

Route No.	Description	Maximum Coaches Scheduled
1	Sutter-California-Jackson-Sacramento	85
5	McAllister	24
6	Haight - Masonic	14
7	Haight - Ocean	30
9	Valencia	24
15	3rd - Kearny	25
19	Polk - Larkin	15
21	Hayes	20
22	Fillmore	24
24	Castro - Divisadero	12
25	Bryant	6
31	Balboa - Turk	23
33	Harrison - 18th - Clayton	11
D	Sutter - Van Ness - Union	20
E	Union	14
H	Potrero	40
R	Howard	12

Total Scheduled	399
Spares	<u>21</u>
Total	420
On Hand and On Order	<u>59</u>
To be purchased	361

Motor Coaches

The following is a list of proposed bus routes, and includes both existing lines and new lines to be established. As the table indicates, some of the trolley coach routes are to be supplemented by motor coaches during peak hours or as the needs of the service may require. The regular motor coach lines are shown on Plate 6c.

The vehicles to be purchased, together with those now in use or on order, will equip these lines and provide replacements of worn out buses for the next five years.

MOTOR COACH LINES REGULAR LINES

Route No.	Description	Maximum Coaches Scheduled
M	Ocean View	2
1	California - 10th Ave. - Mission	11
2	Sunset	15
3	Army - Potrero - Sea Cliff	15
4	Embarcadero	7
5	Marina	1
6	Castro - Market - Mission	7
7	Miraloma - Junior College - Brighton	3
9	Bayshore	2
11	Telegraph Hill	1
11M	Mission & 24th Street	4
14	Roosevelt Way	5

18	Sloat Blvd.	6
23	Crescent Ave. - Alemany	1
26	Guerrero Street	15
27	Bryant	7
41	Second - Market	14
42	S.P. Depot - Sansome - Hunter's Point	6
44	Sansome shuttle	1
50	Geneva	3
51	Silver Ave	7
52	Excelsior	2
53	Southern Heights	2
54	Hunter's Point	12
55	Sacramento - Clay	5
57	Candlestick Cove & Double Rock	6
70	Hunter's Point (Ridge Route)	7
75	Lincoln Park (Saturdays, Sundays & Holidays)	- *
	Total Scheduled	<u>167</u>
	Spares	<u>25</u>
	Total	192

* As the No. 75 route operates during slack periods, buses will be available without any additional purchases.

MOTOR COACH LINES
SUPPLEMENTING TROLLEY COACH LINES
(PEAK HOUR EXPRESS SERVICE)

Route No.	Description	Maximum Coaches Scheduled
1	Sutter - California - Jackson - Sacramento	30
5	McAllister	12
7	Haight - Ocean	10

15	3rd - Kearny (S.F. Depot)	15
21	Hayes	9
H	Potrero	15
31	Balboa	<u>9</u>
	Total Scheduled	100
	Spares	<u>15</u>
	Total	<u>115</u>
	Grand Total	307
	On hand and on order	<u>209</u>
	Net required	98

Track Reconstruction

Although many miles of track are to be abandoned and removed under the proposed plan, there still remains a substantial mileage that will continue in operation and a large part of this trackage is worn out. It is obvious that maximum safety and efficiency, even with new equipment, cannot be attained without renewing these worn tracks. The estimate therefore provides a sum that will put the operated tracks in first class condition. Where necessary streets on which tracks are reconstructed will be completely resurfaced from curb to curb with funds provided by the Public Utilities Commission.

Trolley Coach Overhead

The new trolley coach routes that are proposed will require approximately 164 single track miles of overhead trolley wire and feeders. Where the new trolley coach route follows the line of a former street car line, the trolley span wires can be strung on the existing poles, with a corresponding reduction in cost. At other locations, a complete new overhead system, including poles, will be required.

Substations and Feeders

The substations and feeders that supply electric power to the trolley wires should be modernized and redesigned in accordance with the new requirements. It is proposed to abandon the present antiquated conversion equipment in favor of small, modern rectifying stations, located at strategic points, placing the power supply where it is needed. Such stations can be placed in small, confined quarters, and may be left unattended. They have none of

the objectionable features of stations with large heavy rotating machinery, and may be located in residential districts.

Power Supply is extremely important, and the money spent on a modern, well designed system will be amply repaid in the resulting economies in operation.

Carhouses, Garages and Shops

The carhouses taken over from the Market Street Railway are, for the most part old and dilapidated, and incapable of being remodeled into modern, efficient quarters for the maintenance and storage of equipment. New buildings for inspecting, servicing and repairing rolling stock are contemplated. Vehicles will be stored, for the most part, out of doors, making it possible to effect a saving by reducing the size of the buildings.

The present general shop at San Jose and Ocean Avenues, though extensive, is old and should be completely rehabilitated. The shop buildings are badly in need of repair, and most of the machinery and other equipment is obsolete.

These parts of a transit system, although not in the public eye, are essential for the efficient maintenance and operation of its vehicles. Ample provision should therefore be made for the storage and maintenance of cars and buses.

Removal of Abandoned Property

The removal of abandoned tracks in paved streets and the restoration of the pavement will be covered by a separate bond issue for general street improvements recommended in Section II part 3 of this report. The amount included in this estimate for the removal of abandoned property is limited to tracks in private right of way, poles and trolley wire, and other items, and other items not connected with street pavements.

Comparative Summary

In the tabulation below is shown a condensed comparison of routes and vehicles as they now exist, and as proposed under the modified Newton plan on which the estimate for the bond issue is based.

The principal difference arises from the increased use of buses and the conversion of present street car lines to trolley coach operation.

	<u>Miles of Routes (Round Trip)</u>		<u>Vehicles Scheduled (Maximum)</u>	
	<u>Present</u>	<u>Proposed</u>	<u>Present</u>	<u>Proposed</u>
Electric cars	371	144	509	256
Trolley coaches	17	220	18	399
Motor coaches	265	*318	200*	267
Total	653	682	727	922

* This does not include motor coaches used to replace street cars at night and other off-peak hours.

Construction Program

Under existing conditions not less than a year would be required for the delivery of materials and equipment, and these items should be ordered at the earliest possible moment. Work should also be started on some of the buildings so that the new equipment can be properly cared for when it is delivered. These represent the greater part of the bond issue, so that it will probably be necessary to sell not less than half of the bonds immediately after they have been authorized. A small amount of track reconstruction could probably be started the first year, but this work could not get completely under way until the second year. On an operating system where traffic must be maintained, there are practical difficulties that limit the amount of work that can be undertaken at one time, so that probably a total of 5 or 6 years should be allotted to the complete project.

Financial Aspect

Assuming a twenty million dollar bond issue, redeemed at the rate of one million dollars a year for 20 years, and interest rate of 2%, the annual cost would amount to \$1,400,000 were the issue to be sold immediately upon approval. It is anticipated, however, that only one-half of the issue will be sold in the first year, which would provide for the funds being placed for equipment immediately so that the first two years after issuance of bonds would require an annual financing of \$1,200,000.

An analysis of present day costs of operating the Municipal Railway indicates that at least \$1,200,000 is available to pay financing costs on a proposed \$20,000,000 bond issue. These funds are available from monies now appropriated for such items as new equipment, betterments and reconstruction and replacement. Such funds are needed today to maintain the properties in an operable condition. However, when funds and improvements are available,

it will not be necessary to use current revenues for the above indicated purposes.

In this estimate, no allowance is made for the decrease in operating costs that must result from each improvement that can be made when funds are available.

The proposed bond issue of \$20,000,000 will provide adequate funds for rehabilitating and modernizing the Municipal transit system, resulting in maximum economy of operation, and improved service and safety for its patrons.

Project No.4 Municipal Railway Rehabilitation

It is recommended that the entire Municipal Railway system be modernized through replacements or reconstruction of equipment, tracks, shops and garages and electrical system all in accordance with the modified Newton Plan; to be financed through issuance of general obligation bonds in the amount of \$20,000,000.

Project No. 5: Retirement of Market Street Railway
Company Debt

Section 119.1 of the Charter of the City and County of San Francisco pertaining to the extension of the Municipal Railway by the acquisition of the operative properties of the Market Street Railway and the contract entered into with the Market Street Railway pursuant to the provisions of this section, contains many restrictions which hamper and delay the proper program for the rehabilitation of the Municipal Railway proposed under the \$20,000,000 Bond Issue mentioned in Project 4, hereinbefore outlined.

The particular restrictive provisions which hamper and delay improved transportation are as follows:

1. 57% of the total revenues of the consolidated system must be placed in a separate fund designated "Market Street Railway Extension Fund." From this fund 56% of the total operating expenses of the consolidated system must be paid plus a sum for reconstruction and replacement of the Market Street Railway system amounting to not less than \$500,000. nor more than \$750,000. per year. The balance remaining in the fund at the close of a fiscal year plus the unencumbered balance in the reconstruction and replacement fund must be paid to the Market Street Railway Company and applied first to the payment of interest on the purchase price and the balance to the unpaid principal. Therefore, any improvements made to the consolidated system must be financed from 43% of the total revenues assigned to the Operating Fund after provision for 44% of total operating expenses and bond interest and redemption on the 1913 Bond Issue.
2. Adjustments of the fare structure to establish other than uniform rates in special cases are impossible due to the provision that the Commission shall not establish other than uniform rates except for school children and other special cases pursuant to which reduced or free transportation existed in accordance with the existing practice of the Municipal Railway at the date of consolidation.
3. Until the purchase price shall have been paid in full, the City cannot make any extensions, radical changes or alterations to the Market Street Railway operative properties or abandon any substantial portion thereof except only to the extent that such extensions or abandonments are required by reason of the unification of the operations of the operative properties with those of the Municipal Railway. This provision restricts the proper consolidation and operation of the two systems since elimination of unnecessary paralleling lines is prohibited.

To eliminate the restrictive measures contained in Section 119.1 of the Charter, it is recommended that the estimated amount due the Market Street Railway as of June 30, 1947 for payment of principal and interest, amounting to \$2,141,277.24, be liquidated through the

issuance of general obligation bonds. Upon the payment in full of the cost of the operative properties the provisions of Charter Section 119.1 become inoperative and appropriation of revenues will be in accordance with the regular budget procedure as provided in other sections of the Charter. The mandatory provision for an annual replacement and reconstruction fund in an amount from \$500,000. to \$750,000. will be eliminated, thereby releasing these sums for appropriation to bond interest and redemption funds for payment on this debt and the \$20,000,000. bond issue before mentioned. Consolidation of budgetary control, plant and property records will be accomplished in place of maintaining two records of each under the provisions of section 119.1.

The attached schedules showing payments made and estimated to be made to the Market Street Railway Company as of July 1, 1947 indicate that the sum of \$2,141,477.24 will remain unpaid. It will be noted that the total interest charges from date of acquisition to June 30, 1947 will amount to \$332,433.21. The present rate of interest 4% should be reduced to 2% or lower through the issuance of general obligation bonds for the purpose of liquidating the outstanding debt to the Market Street Railway. The estimate of the amount due is based on the operations of the Municipal Railway for the seven months of the 1946-1947 fiscal year.

Project No. 5: Retirement of Market Street Railway
Company Debt.

It is recommended that a general obligation bond issue in the amount of \$2,200,000. be submitted to the electorate for approval for the purpose of liquidating the outstanding debt to the Market Street Railway Company.

PAYMENTS ON ACQUISITION OF MARKET STREET RAILWAY COMPANY
 PROPERTIES TO JANUARY 31, 1947
 AND ESTIMATED PAYMENTS AS OF JUNE 30, 1947

Purchase Price of Market Street
 Railway Properties acquired
 September 29, 1944 at 5:00 A.M.

\$7,500,000.00

Payments on Principal

Sept. 28, 1944	\$2,000,000.00
Jan. 31, 1945	1,000,000.00
June 30, 1945	1,000,000.00
Sept. 28, 1945	500,000.00
June 28, 1946	813,089.14
Sept. 28, 1946	<u>58,248.68</u>

5,371,337.12

Balance due on Principal as of
 July 1, 1947 (Estimated)

\$2,123,662.88

Interest Charges

2% on \$1,000,000.00 from Sept. 29, 1944 to Jan. 31, 1945 - 124 days	\$ 6,794.52
2% on \$1,000,000.00 from Sept. 29, 1944 to June 30, 1945 - 274 days	15,013.70
3% on \$500,000.00 from Sept. 29, 1944 to Sept. 28, 1945 - 1 year	15,000.00
4% on \$3,000,000.00 from Sept. 29, 1944 to June 30, 1945 - 274 days	90,082.19
4% on \$3,000,000.00 from July 1, 1945 to June 28, 1946 - 363 days	119,342.46
4% on \$2,136,911.56 from June 29, 1946 to June 30, 1946 - 2 days	479.32
4% on \$58,248.68 from July 1, 1946 to Sept. 28, 1946 - 90 days	574.50
4% on \$2,128,662.88 from July 1, 1946 to June 30, 1947 - 1 year	<u>85,146.52</u>

Total Interest Charge to June 30, 1947 \$332,433.21

Interest Payments to January 31,
 1947 \$247,206.69

Interest Payment on June 30, 1947 (Estimated)	<u>72,332.16</u>	<u>319,538.85</u>
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Interest Charge Unpaid as of
 June 30, 1947 (Estimated)

\$12,814.36

Estimated Amount Due Market Street Railway
 Company as of June 30, 1947 - Principal
 and Interest

\$2,141,477.24

Estimate of Amount Due on Purchase of Market Street Railway
Properties as of July 1, 1947:

Due on Principal June 30, 1947	\$2,128,662.88
Interest at 4% July 1, 1946 to June 30, 1947	85,146.52
Principal and Interest Due June 30, 1947	\$2,213,809.40
Estimated Payment to be made June 30, 1947 in accordance with Charter Section 119.1	<u>72,332.16</u>
Due Market Street Railway July 1, 1947 (Est.)	\$2,141,477.24

Project No. 6 - Acquisition of the Operative Properties of the California St. Cable Railroad Company

The Charter of the City and County of San Francisco states in Section 119, "It is the declared purpose and intention of the people of the City and County, when public interest and necessity demand, that public utilities shall be gradually acquired and ultimately owned by the City and County"; that the City's mass transportation system is such a utility was demonstrated when the people first authorized the construction of the former Municipal Railway, and secondly approved the purchase of the Market Street Railway Company properties. To fulfill the intent of this expressed policy it is proposed that the operative properties of the California Street Cable Railroad Company be acquired, and thus place under City ownership and control all the mass transportation facilities within the City.

The California Street Cable Railroad Company operates 5½ double track miles consisting of the 3 mile California Street line from Drumm Street to Presidio Avenue, the Hyde Street line from Beach Street to Pine Street, on Pine Street to Jones Street, on Jones Street to O'Farrell Street, on O'Farrell Street to Grant Avenue; and the short line on Jones Street from O'Farrell Street to McAllister Street. Twenty-eight cars are operated on these routes which, added to nineteen spares, gives a total of forty-seven (47) cable cars owned. The buildings of the company consist of a power plant building and an office building. This railway is operating under a 25 year permit granted March 23, 1931, which hence has ten years to run.

The tracks, cable cars and other equipment of this company are in excellent operating condition. This condition obtains from a policy of the management to constantly maintain the properties by reconstruction with the best materials and always to a high standard. Selection of capable operators and artisans is also a contributing factor.

The acquisition of these properties is proposed and recommended for the following reasons:

1) To complete the consolidation of all mass transportation facilities in San Francisco under one management and one jurisdiction;

2) To insure continuous satisfactory transportation service to the areas now traversed by this company;

3) To effect the economies to the riding public which are possible through elimination of duplicating transit lines;

4) To prevent any possible inconvenience to riders, or other unsatisfactory conditions which may result from a system which may be forced at any time to operate at a loss;

5) To permit the use of the cable cars on California Street or a reconstructed Powell and Fisherman's Wharf line in accordance with the recommendations made for Project No. 7.

Project No. 6: California Street Cable Railroad Company
Purchase

It is recommended that a proposition for the acquisition of the California Street Cable Railroad Company property be placed on the ballot for vote by the people at the same election as the railway rehabilitation bond issue herein before mentioned. Payment should be made through the issuance of general obligation bonds in the legislation proposed. The maximum amount of such bonds should be fixed by appraisal and by negotiation with the management of the California Street Cable Railroad Company prior to the preparation of any bond issue proposal. It is estimated that such amount will not exceed \$250,000.

Project No.7: Disposition of Cable Cars

The recommendation of this committee is to convert all cable car lines into more modern means of transport -- eventually, trolley coaches.

In reaching this decision, fully realizing that public reaction would at first be adverse, your committee has taken into consideration three factors which make cable car operation in a modern city inadvisable.

They are:

- (1) Interference with the flow of traffic and with the operations of other forms of mass transportation.
- (2) Safety.
- (3) Financial loss involved.

With reference to the first consideration, the major portion of the city's cable car mileage runs at right angles to the principal arteries feeding the downtown business district. At many intersections the only place cable cars can stop to discharge or take on passengers is in the middle of the intersection, thus not only impeding traffic in their line of travel but completely blocking it in both directions against the line of travel.

At some intersections and at some curves, cable cars must "free wheel" or proceed on momentum. Fewer and fewer San Francisco residents, including both motorists and pedestrians, recognize this fact as time passes and it has now come to a point at which the 22 cable cars in operation by Municipal Railway had 331 collisions with other vehicles last year. Each of these collisions further delays traffic. The tendency will be toward an even greater number of collisions as traffic density increases.

As to safety, the above paragraph provides a clue. In 1946, the 716 accidents involving Municipal Railway cable cars resulted in the payment of \$27,215.54 in accident claims.

Because there have been no spectacular accidents involving cable cars recently, it is generally assumed that they are comparatively safe. It would require only one derailment at a strategic point at a strategic time to bring about the most appalling accident in San Francisco transportation history and bankrupt the Municipal Railway overnight. Every day cable cars are operated after suitable substitutes can be obtained will be a gamble scarcely worth the taking.

The cable car rails are worn so thin, the slots are so warped and cables currently being manufactured are so inferior that the ordinary hazards of operation have been almost trebled. While it is true that cables are used as a brake, and a wedge in the slot is used as an emergency, a derailment might at any time cause the

grip to separate from the cable. At the same time, the derailed car would be out of position to fix the wedge in the slot or to apply brakes to the rails. If the derailment took place on a hill, the results could well be imagined.

As to costs of rehabilitation of the cable car system and the operation of cable cars thereafter, as compared to the costs of substituting motor coaches and their costs of operation, our studies indicate that the cable car system now municipally owned would operate at an annual loss of \$267,468 as compared to a net profit of \$123,262 if motor coaches were substituted. A detailed comparison of these costs is attached. It will be noted that even if materials were available, it would require more than \$1,000,000 to rehabilitate the cable car system to perpetuate a heavy loss, whereas the motor coach investment would only be \$366,000 and would produce an annual profit. The yearly difference between the two would represent a saving of \$390,730.

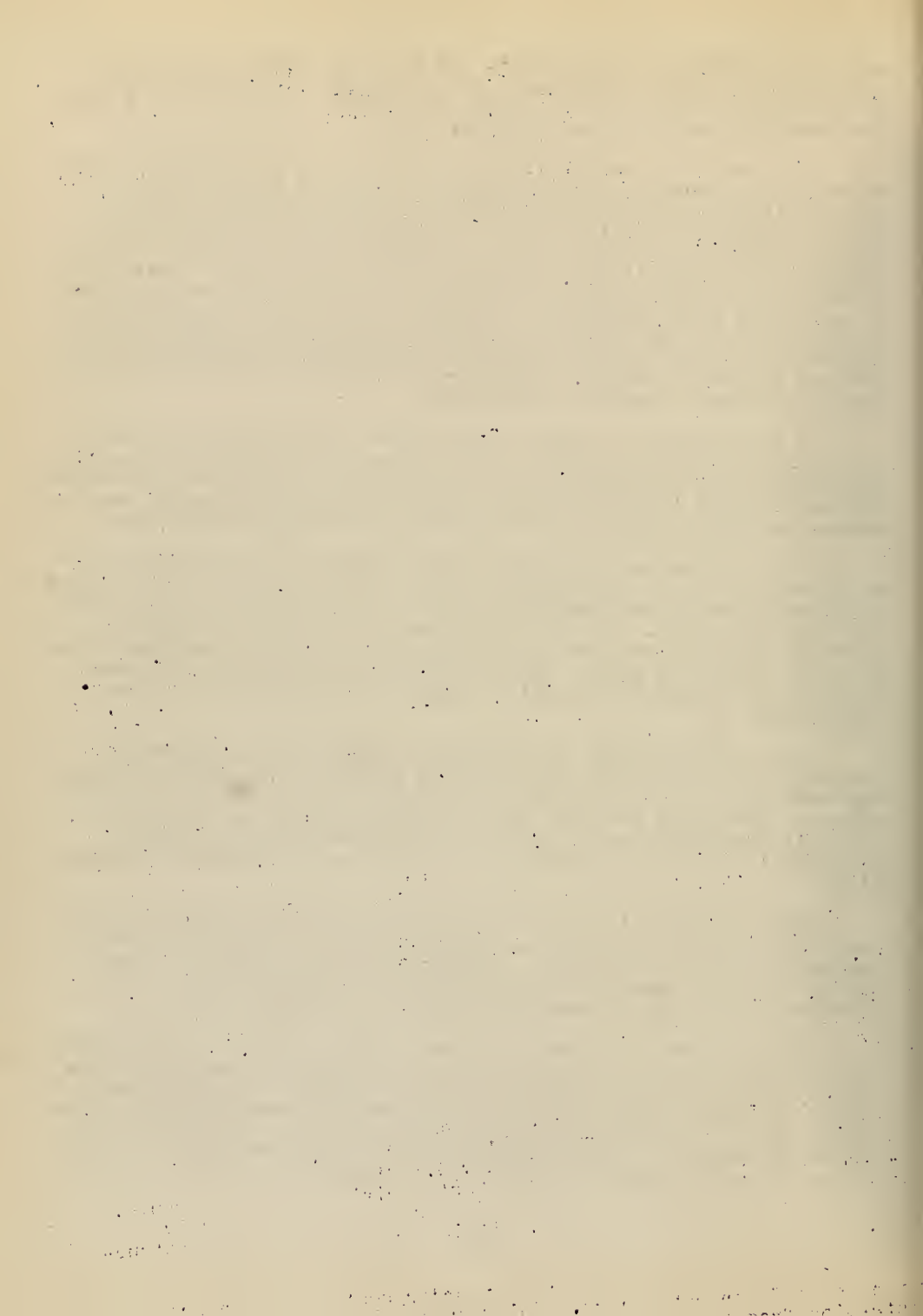
It should also be noted that in case a decision were made to continue cable car operations, the entire system would have to be shut down for approximately one year during reconstruction and that the motor coach investment would have to be made to provide service during that year, thus making the total investment \$1,366,000.

It is not generally realized that cable cars are by far the most expensive form of transit vehicle to operate. During December 1946, which was a representative month, the operating expense per car mile was \$1.29. The corresponding expense for trolley car operation was 63 cents per car mile, while for motor coaches it was 36 cents per coach mile. These figures do not include the fixed charges comprising depreciation, damage claims and interest on investment.

Cable cars are also the slowest vehicles on the Municipal system. While the cable travels at a speed of 9.5 miles per hour, the average speed of the cars is only 5.5 miles per hour as compared to 8.4 miles per hour on the Castro-Divisadero coach route, which is comparable as to grades. Slow speed does not merely increase the costs of operation. It is a serious traffic obstruction.

Motor coaches like those now on order seat 44 passengers as compared to 30 on cable cars. Being enclosed, they would afford protection from the weather. They and trolley coaches are the safest vehicles operated by the Municipal Railway, having an accident rate of about one-fifth that of the cable cars.

Discontinuation of the cable car system operated by the Municipal Railway would not wholly solve the traffic interference problem, although it would result in safer and more economical operation. In view of this fact, it is the recommendation of this committee that the California Street Cable Railroad properties be acquired by means of a bond issue and that these properties be converted to motor coach or trolley coach operation.



This committee is keenly aware of the high regard in which cable cars are held by many people and of the publicity advantages inherent in their operation. It should be noted, however, that an annual loss of \$390,730 is a high price to pay for publicity - particularly when it is observed that the entire annual budget for publicity and advertising of the City and County is only \$300,000. This, moreover, is paid by all the taxpayers, whereas the cable car loss would be paid exclusively by mass transit patrons.

However, should the Council determine that cable cars should not be abandoned altogether, the technical committee herewith makes two alternative proposals:

(1) Abandon the presently owned municipal cable car lines and continue operation of the California Street section of the California Street Cable Railroad, eliminating the Jones shuttle and the Hyde-O'Farrell Street operation. From a sentimental standpoint, the California Street system is the oldest line. Its condition is such that it could be operated longest with the least subsidy and the least amount of reconstruction. It enjoys the best riding habit, suffers the least losses and because it travels with the prevailing vehicular traffic, could be operated with the least interference with traffic. Its continued operation would fit far better into the overall traffic and transportation plan than any other cable line.

(2) Abandon the California Cable Railroad operation and continue the Powell Street line in operation between Powell and Market and Fisherman's Wharf. This would involve elimination of the Washington-Jackson section and the routing of the Powell line from Market to Jackson, west on Jackson to Hyde and north on Hyde to Fisherman's Wharf. The return would be south on Hyde to Washington, east on Washington to Powell and thence south to Market. It will be noted that this would be a combination of the existing Powell route with a portion of the California Cable Railway.

The Technical Committee does not recommend to the Council that any vote be held on cable car abandonment unless the Council should adopt this final alternative which would require capital expenditures in excess of \$1,000,000. A mere vote on abandonment would produce no money for rehabilitation or for supporting the annual loss. If, however, the Council believes it wise to adopt this second alternative to the Technical Committee's first and preferred recommendation, then it is recommended that the vote be for an additional bond issue to finance rehabilitation and to provide an annual subsidy for operations. If the principal benefits to be derived from continued cable car operation are to be measured in terms of publicity, then the entire electorate, rather than a small part of it, should be given an opportunity to express its views in terms of dollars and cents rather than sentiment.

(1) The Technical Committee recommends a bond issue for the purchase of the California Street Cable Railway and the conversion of all cable car operations into either motor coach or trolley coach operation.

(2) As a second choice, the committee recommends a bond issue for purchase of the California Street Cable Railway, continuation of its California street operation with cable cars and the abandonment of the Jones shuttle, the Hyde-O'Farrell street section and all the Powell-Washington-Jackson lines.

(3) As a third choice, the committee recommends a bond issue for the purchase of the California Street Cable Railway, abandonment of all cable car operations except the Powell street operation between Market Street and Fisherman's Wharf via Powell Street, Jackson Street and Hyde Street, and a second bond issue for the rehabilitation and upkeep of the cable car properties to be retained.

FINANCIAL DATA
OPERATION OF PRESENT MUNICIPAL CABLE SYSTEM
(PREDICATED ON PRESENT REVENUES AND EXPENSES)

New Investment:

Trackwork, etc	\$700,000
Cars	250,000
Contingencies	<u>50,000</u>
TOTAL	\$1,000,000

Bond Charges:

Assuming 2% serial bonds, Redemption period 25 years.

Annual Redemption	\$ 40,000
Av. Annual Interest	<u>10,400</u>
TOTAL	\$ 50,400

Annual Statement:

Annual Revenue (At Dec. 1946 level)	\$470,000
Operating Expenses, 465,000 car miles at \$1.29	<u>599,850</u>
Operating Deficit	129,850
Injuries and Damages, same as year 1946	87,218
Bond Charges	<u>50,400</u>
Annual Loss	267,468

FINANCIAL DATA

OPERATION OF PROPOSED MOTOR COACH SYSTEM REPLACING PRESENT MUNICIPAL CABLE SYSTEM

Investment:

10 Coaches on order at \$15,500	\$155,000
8 Coaches extra at \$18,500	<u>148,000</u>
Storage, service and repair facilities	<u>63,000</u>
TOTAL	\$366,000

Bond Charges:

Assuming 2% Serial Bonds, Redemption
period 10 years.

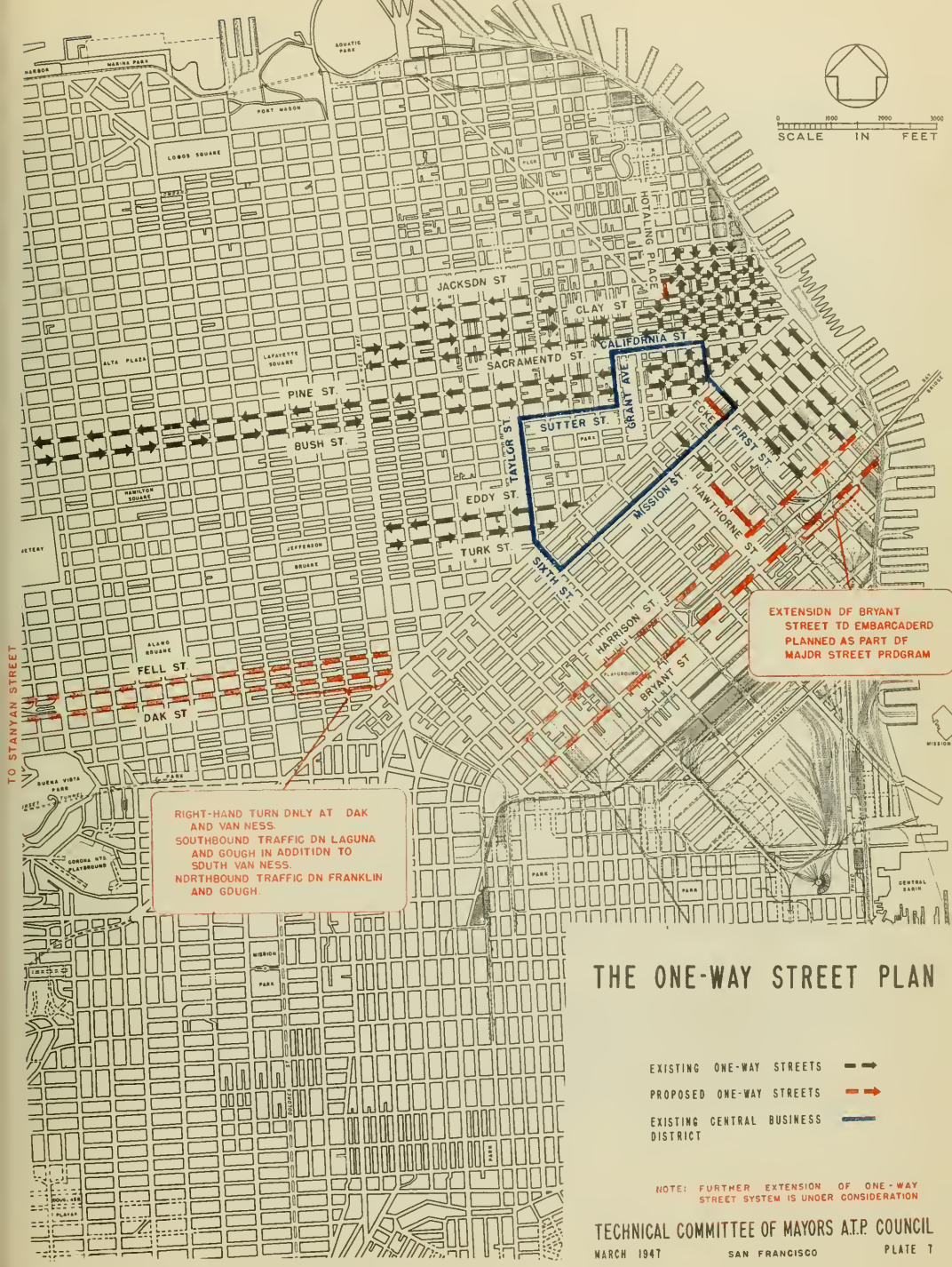
Annual Redemption	\$ 36,600
Av. Annual Interest	<u>7,320</u>
TOTAL	\$ 43,920

Annual Statement:

Annual Revenue (at Dec. 1946 level)	\$470,000
Operating Expenses, 490,000 coach miles at 44¢	<u>215,600</u>
Operating Surplus	\$254,400
Deduct: Injuries and Damages (yr. 1946)	87,218
Bond Charges	<u>43,920</u>
TOTAL DEDUCTIONS	131,138
Profit after all charges	\$123,262



0 1000 2000 3000
SCALE IN FEET



RIGHT-HAND TURN ONLY AT DAK
AND VAN NESS.
SOUTHBOUND TRAFFIC ON LAGUNA
AND GOUGH IN ADDITION TO
SOUTH VAN NESS.
NORTHBOUND TRAFFIC ON FRANKLIN
AND GOUGH.

EXTENSION OF BRYANT
STREET TO EMBARCADERO
PLANNED AS PART OF
MAJOR STREET PROGRAM

THE ONE-WAY STREET PLAN

- EXISTING ONE-WAY STREETS —→
- PROPOSED ONE-WAY STREETS —→
- EXISTING CENTRAL BUSINESS DISTRICT

NOTE: FURTHER EXTENSION OF ONE-WAY
STREET SYSTEM IS UNDER CONSIDERATION

VI THE ONE-WAY STREET PLAN

Project No. 8

Traffic flow features inherent in the design of freeways include the complete elimination of left turns against opposing flows of traffic, and at least two, generally three, lanes of traffic in each direction.

On a pattern of narrow city streets which parallel each other closely, such results can be obtained by instituting a system of one-way streets. On narrow roadways three lanes of one-way traffic can be derived where only one lane in each direction is now obtained. A further advantage derived from the institution of a one-way street system is that left turns against opposing traffic are avoided, for there is no opposing traffic on a one-way street, and left turns can be made freely.

The Committee recognizes the fact that one-way streets may be an effective tool in improving traffic flow under certain conditions. However, there are also objections to its use from the point of view of business establishments located along such streets. For this reason the Committee has avoided a recommendation for extensive increased use of this tool at the present time.

The only additional major one-way streets recommended in the report are Bryant and Harrison as a pair to serve the Bridge and Bayshore Freeway in the neighborhood of their junction, and Oak and Fell Streets as a pair to provide the first stage of development of the Panhandle Freeway.

In addition, three small but very important streets are recommended to be made one-way streets, namely, Hawthorne Street, Ecker Street, and Hoteling Place, as shown on Plate 7.

The Committee recognizes, however, that the value of one-way streets depends upon the elimination of illegal obstructions, principally those caused by double parking. Double parking is controlled by the Vehicle Code of the State of California, and no minimum fine is set. Therefore, the penalties to be assessed come within the discretion of the Municipal Court judge hearing such cases. At present the universal fine for double parking violations is one dollar (\$1.00). The Committee feels that this penalty should be substantially increased.

The creation of one-way streets on Harrison and Bryant from Fifth to 10th Sts. will be made as soon as adjustments in the transit lines on those two streets can be made to conform with this change. The extension of the one-way feature on these streets to The Embarcadero will depend upon the extension of Bryant Street to The Embarcadero. Also, the time of establishment

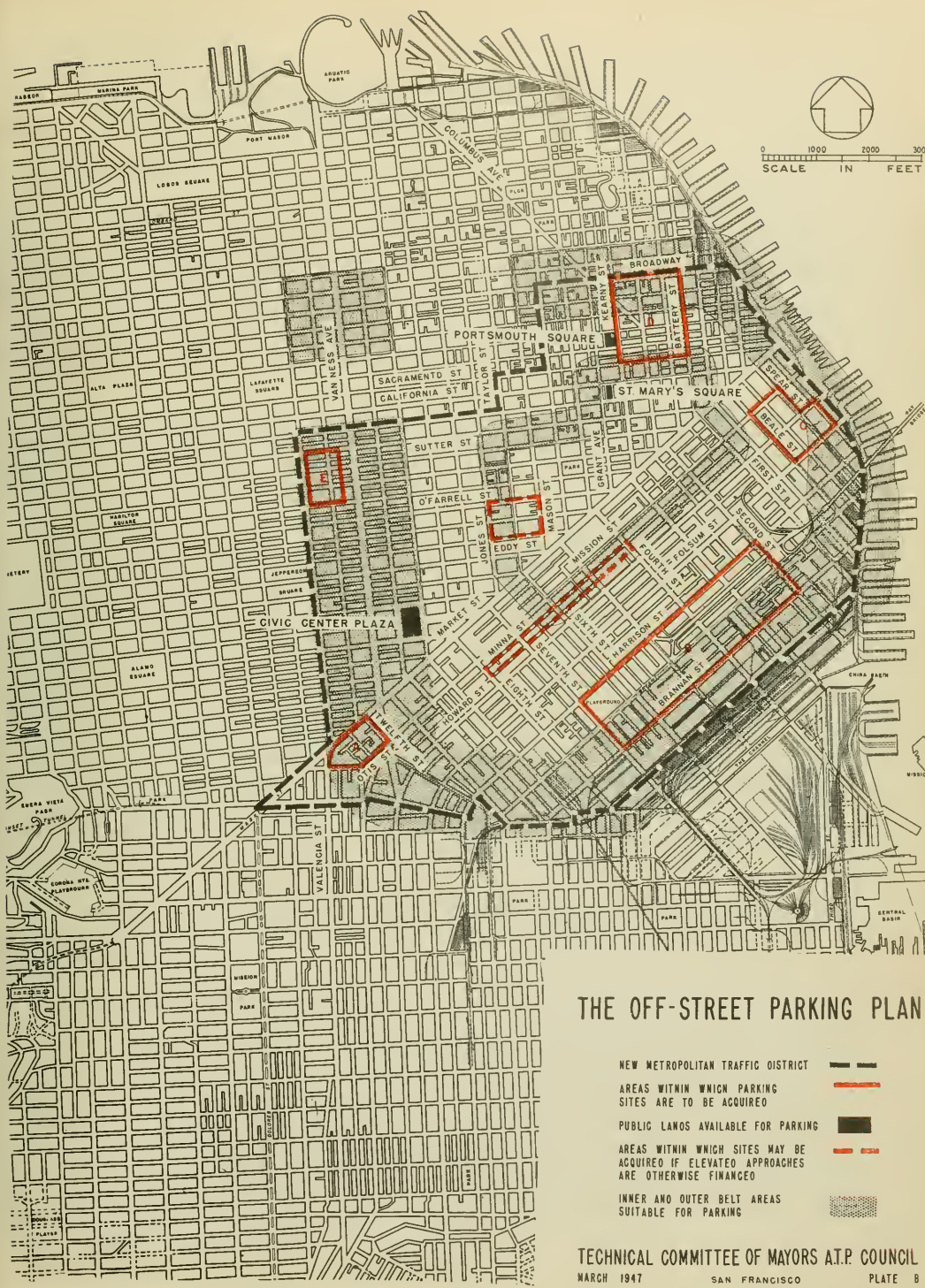
of one-way traffic on Oak and Fell Streets will be dependent upon certain street improvements, the removal of street car tracks from Oak Street, and the installation of traffic controls.

Also, the Committee recommends extension to a full twenty-four hours of the one-way street regulations on many streets and alleys where such regulations are not in effect during the entire twenty-four (24) hours at the present time. This causes confusion in the minds of motorists and prevents sound enforcement by the Police Department, and the proposed revision will bring about clarity and precision.

Project No. 8: The One-Way Street Plan

Enactment of legislation establishing additional one-way streets and amending certain existing one-way street legislation as described above and shown on Plate 7.

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY
530 SOUTH EAST ASIAN AVENUE
CHICAGO, ILLINOIS 60607-7070
TEL: 773/936-5000 FAX: 773/936-5001
WWW: WWW.CHEM.UCHICAGO.EDU
E-MAIL: CHEM@UCHICAGO.EDU



0 1000 2000 3000
SCALE IN FEET

THE OFF-STREET PARKING PLAN

- NEW METROPOLITAN TRAFFIC DISTRICT ———
- AREAS WITHIN WHICH PARKING SITES ARE TO BE ACQUIRED ———
- PUBLIC LANDS AVAILABLE FOR PARKING ■■■■
- AREAS WITHIN WHICH SITES MAY BE ACQUIRED IF ELEVATED APPROACHES ARE OTHERWISE FINANCED ———
- INNER AND OUTER BELT AREAS SUITABLE FOR PARKING ■■■■

VII THE OFF-STREET PARKING PLAN

Project No. 9

The Problem

The usefulness of the private automobile in congested urban areas is limited, not by the power and capacity of the vehicle itself, but by the inadequacies of the street system, and by the shortage of parking spaces. Public responsibility for the improvement of streets and highways has long been accepted as a matter of course. But the provision of parking space has only recently come to be recognized as so closely related to the economic welfare of the community that it is also clearly a matter requiring public action.

When the automobile was new, curb parking met the need well enough for a while. But today when everyone drives, the problem of where to leave the thousands of cars while their owners are working or shopping is totally unsolved.

The number of vehicles entering downtown San Francisco is large and increasing; it will tend to increase more rapidly than ever in the near future, because of increased registration and improved highway facilities. The amount of space available for parking is limited and has been diminishing rather than increasing. Curb parking, once providing for about 15,000 vehicles in the existing Central Business District, has been reduced by restrictions necessary for the free movement of traffic, until today it provides space for only about 4,400 vehicles. Off-street parking lots in this area contain about 1,600 spaces, and private parking garages, including the development under Union Square, can accommodate but 7,600 cars. This makes a total of 13,600 spaces. But four times that number of cars enter the City daily over the Bay Bridge alone. The capacity of the proposed Bayshore Freeway will be another 50,000 vehicles per day. Residents of San Francisco now entering the Central District every morning number about 100,000. If one-third of these drive in, about 20,000 vehicles would be used.

Clearly, some vigorous action is necessary. This may take several forms, each of which has its place in a sound program - none is sufficient by itself.

Types of Action Available

The first approach is that emphasized elsewhere in this report - the improvement of public transit so that it may compete more favorably in every respect with private transportation. Every type of transit vehicle is more economical of street space, and none presents a parking problem. Whenever one of our own citizens whose work requires him to spend the day in the Central area can be induced to leave his automobile at home, the community as a whole is better off. For if he drives in, some where he must find storage for eight hours for his automobile. This requires 200 square feet of valuable space.

Whether public or private, whether on or off the street, it means that one space less is available for the shopper or the visitor from out-of-town.

The second approach is to provide for more efficient use of curb space for parking. The visiting shopper or client with a brief errand must be provided with convenient parking space, for an automobile in motion has no buying power.

Sound regulation of curb parking, carefully correlated with traffic flows, ought to increase, rather than reduce, the total number of persons accommodated in this way. Such regulations are discussed in more detail in Section Two, Part VIII.

The third method is to provide or encourage the provision, by private investors, of additional off-street parking space. In connection with some types of new construction, provision of a certain proportion of parking space within or adjacent to the building can, and should be, required by law. But in recent years, high land values, the difficulty of assembling adequate sites, and other cost factors have limited the operation of parking lots and the construction of parking garages. Today they meet only a small portion of the demand, and at relatively high fees. The need, therefore, is to find a way in which the community as a whole, considering the vital effects upon the general welfare, can bring its power to bear upon the problem, so as to assist private enterprise and to provide increased amounts of parking at reasonable rates. This can be done by setting up a public fund for the purchase and assembly of sites in accordance with an over-all plan.

These sites would be primarily for the relatively "long-time" parking of two hours or more. The facilities would be of two very general types: (a) large capacity multi-level structures near the edges of the Central Business District, and (b) off-street parking facilities on the outskirts of the larger Metropolitan Traffic Center.

In either case, the areas selected must be (1) located conveniently to major thoroughfares, (2) close to existing or specially provided transit service to the destination area, (3) of sufficient size to provide for efficient operation and to afford material relief, and (4) not presently occupied by more desirable or necessary uses.

Site selections will be made so that the City will secure revenues from such sites sufficient to return the money for re-investment.

Legal Powers Involved

The City has the power under State law to use any public property, or to purchase or condemn land, for the provision of off-street parking, and may lease or grant franchises for the use of such facilities.

There is also enabling legislation which provides for the formation of improvement districts for the purpose of providing public parking. But the three acts dealing with this subject, (Stats. 1941, Chaps. 246 and 1098, and Stats. 1943, Chap. 971) are all limited by provisions that establishment of the districts can only follow petition of a large proportion (about 25%) of the property owners concerned. They are thus only adapted to localized solutions.

New legislation is needed to clarify and enlarge these powers, and to provide for the establishment of a Municipal Parking Authority. Such an authority would regulate all off-street parking and would have the broad powers necessary to administer large-scale projects involving complex negotiations as to approach structures; to coordinate comprehensive solutions with other phases of the transportation problem, and to finance its operations on a long-term basis as a corporate body. It could make business-like arrangements with private interests where the structures involved would be carried in part by the use of the ground-floor and the upper stories for other uses. It is recommended that a concerted effort be made to secure legislation along these lines, so that such an Authority can be created. Unfortunately this will take some time.

Immediate Action Necessary

But immediate action is needed. Some additional off-street parking must be provided at once, within easy reach of the Central Business District. The existing bridges, the Bayshore Freeway soon to be built, and the proposed Second Bay Crossing all will deliver a tremendous volume of traffic into the City. The public interest demands that added space off the streets be secured at once, as one of the steps necessary to a complete solution of the problem.

It is, therefore, recommended that \$5,000,000 for this purpose be included in a proposed bond issue, for the purchase of land, using eminent domain procedures if necessary, in the general areas indicated in red on Plate 8.

Use of Public Properties

It is also recommended that the use for parking of publicly owned land in the Metropolitan Traffic District be extended. The successful operation of the Union Square Garage, where four levels of underground parking were constructed beneath a public square, has led the Park Commission to consider similar developments at Portsmouth Square, St. Mary's Park, and the Civic Center Plaza. This policy has merit, and is endorsed. Care is required in planning the approaches so as to avoid any interference with normal surface traffic flows. The application of this plan is, however, limited, as there are but few such open spaces available.

Spaces beneath and adjacent to the Bay Bridge, and those which will exist under extensions of the Freeway system should receive attention also. Space for many vehicles could be made available in

such locations, under proper operational arrangements which have thus far not been developed. Nor should the importance of providing space, either free or at minimum fees, near the outer ends of transit lines be overlooked.

Proposal for an Elevated Parking Terminal Loop

Preliminary studies have been made as to the possibility of developing a multiple-purpose project to utilize the space between Minna and Natoma Streets, along the southerly edge of the Central Business District. The basic idea underlying this proposal is to provide access to and through the area by an elevated structure, connected at the west end to the Bayshore Freeway and at the east end to the Bay Bridge. On adjacent property, a continuous series of multi-story garage structures with an eventual capacity for upwards of 20,000 vehicles could then be constructed by private capital. Automobiles entering or leaving the upper floors would pass directly from or to the elevated loop, thus reaching the two major highways without using the City streets. The structure would also serve to provide additional outlets to the down-town area, and as a loop terminal route for an extended system of inter-urban bus lines. It might also provide space for other terminal purposes, such as a future central airlines terminal and various bus depots. It would bring users of the parking facilities close to Market Street.

This proposal offers great possibilities, and deserves extended study as part of any over-all plan for the improvement of transportation facilities, as well as for meeting the need for parking space. It cannot be developed entirely as a private enterprise for obvious reasons. The public contribution is three-fold, including (1) aid in assembling the land, and in spreading the cost thereof through the use of public credit, (2) the construction and maintenance of the elevated approaches, and (3) the regulation of the use, including the rate structure, so as to protect the public interest and at the same time to attract private capital.

It is equally clear that such a project cannot be developed solely as a public enterprise, for much of the valuable frontage and ground floor area would bring in high returns for non-parking and strictly private uses, thus operating to relieve the parking patrons of what would otherwise be excessive carrying charges.

Studies of this matter should be pushed forward without delay, and the solution finally reached made the basis for early action. But the proceeds of the bond issue should not be specifically destined to this project in preference to others where immediate action can be taken, unless and until the following difficulties have been overcome and until financing in addition to that recommended in this report is secured:

1. The project does not lend itself to "stage" construction, but depends for its success upon close integration and assured financing of all its elements - i.e., land acquisition, elevated approach construction, and private building.

2. Since it involves the clearing of an area now intensively used, partly for residential purposes and characterized by some degree of blight, the process is one best adapted to joint action by authorities which could assume continuing responsibilities such as a Re-development Agency and a Municipal Parking Authority, neither of which yet exists.
3. No commitments have been secured as to adjustments in the plans of the State Highway Commission that would be needed to insure the feasibility of the project and to make it effective.
4. Engineering studies have not yet progressed sufficiently to permit reliable estimates of over-all costs, revenues and capacity.

Acquisition of Sites for Off-Street Parking Facilities

It is, therefore, recommended that, unless and until these difficulties shall have been overcome, the proceeds of the proposed bond issue be used to acquire carefully selected parcels up to a full block in size near the edges of the Metropolitan Traffic District, in the general location indicated on Plate 8 by the hatched area, and in particular the areas designated A, B, C, D, and E. In each case, the provision of frequent and convenient transit service direct to the shopping and financial districts is considered an essential feature.

Field studies have been made, and it is believed that a number of sites can be found in the designated areas where such facilities could be located with advantage.

Revenues from these enterprises are certain at least to meet operating costs, interest charges and the equivalent of taxes now collected. Thus no loss to the public is involved, as the land will always have a high market value. And if patronage attains, as is confidently expected, a volume sufficient to return the investment, the result will be to provide a revolving fund out of which additional facilities at other sites may be secured.

It is recommended that the bond issue be so drawn as to require that before the purchase of any site is authorized by the Board of Supervisors it shall be submitted to the Planning Commission for approval, in order to insure coordination with the general features of the Master Plan. It is not considered desirable to specify exact locations at this time, since a certain degree of flexibility is important as a means of meeting changing conditions and to avoid excessive costs.

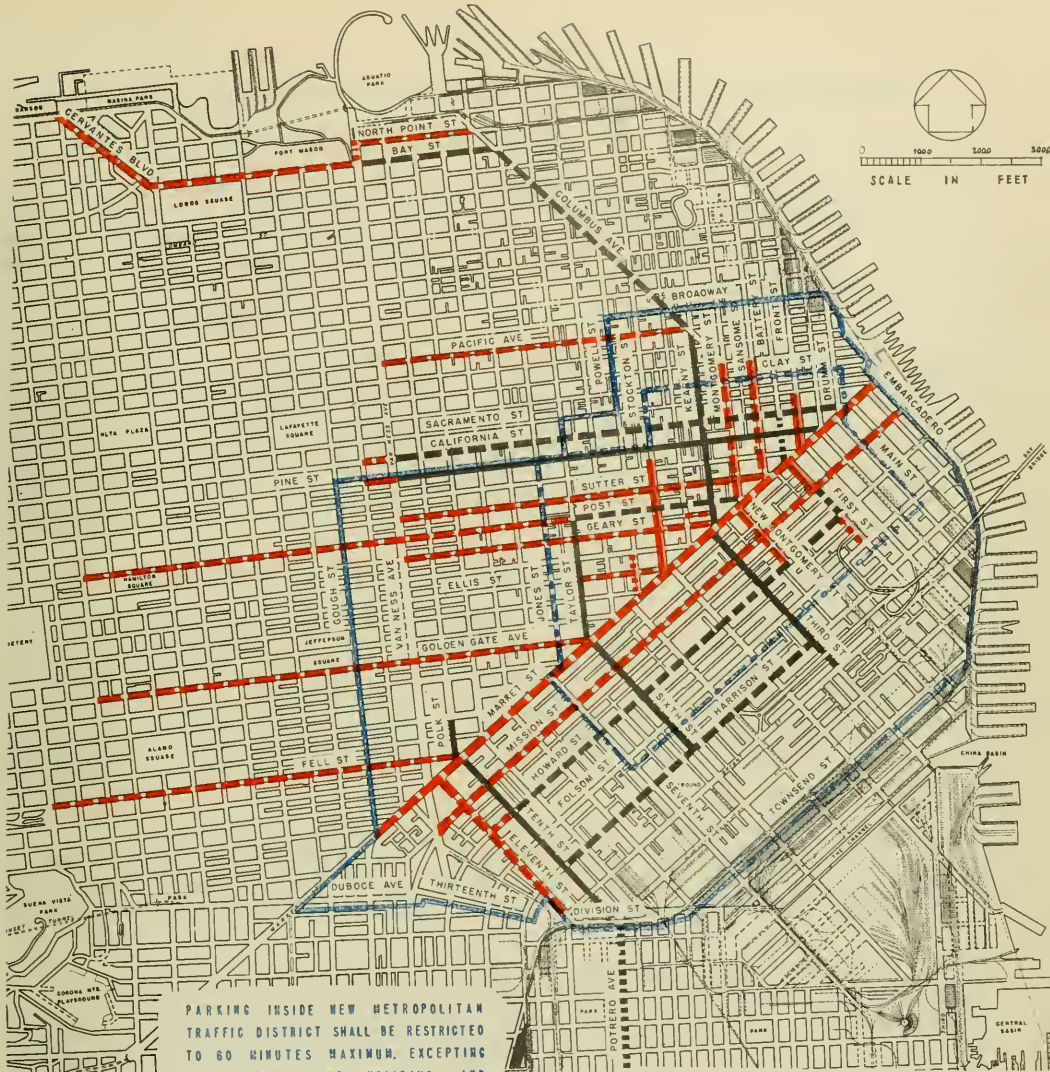
Summary of Off-Street Parking Recommendations

1. That local transit facilities be improved and extended so as to reduce the amount of space required for all-day parking of workers' automobiles.

2. That curb parking space be so regulated as to provide for the maximum of short-time customer-client-visitor uses consistent with the requirements of moving traffic.
3. That in all future construction, appropriate provision for off-street parking should be mandatory.
4. That the construction of parking garages by private capital should be encouraged, particularly by the use of public powers to make suitable sites available.
5. That bonds be issued in the amount of \$5,000,000 for the purpose of acquiring land to be used for parking facilities.
6. That the construction of underground facilities beneath certain public parks be approved, and that other unused public property be made available for parking, where appropriate.
7. That the proposal for an elevated terminal parking loop, as outlined, be studied and actively forwarded to a point where action can be taken.
8. That new State legislation be sought to enable the City to establish a Municipal Parking Authority, with power to regulate all off-street parking, to acquire and operate or contract for the operation of parking facilities.
9. That sites be purchased from the proceeds of the bond issue, in or near the areas generally designated on Plate 8, subject to approval in each case by the Planning Commission as to conformity with the Master Plan.

Project No. 9: Off-Street Parking

It is recommended that additional short-time off-street parking facilities within the new Metropolitan Traffic District and long-time off-street parking facilities on the fringes of this District be provided and that the City, through the issuance of general obligation bonds in the amount of \$5,000,000 establish a land purchase revolving fund to aid this program.



PARKING INSIDE NEW METROPOLITAN TRAFFIC DISTRICT SHALL BE RESTRICTED TO 60 MINUTES MAXIMUM, EXCEPTING ON SUNDAYS AND HOLIDAYS AND AFTER 12 NOON ON SATURDAYS

NO STOPPING - TIME LIMIT PARKING PLAN

SHOWING TRAFFIC ZONE NUMBER ONE
AND NEW METROPOLITAN TRAFFIC DISTRICT

	EXISTING	PROPOSED
NO STOPPING - BOTH SIDES		
NO STOPPING - NORTH & EAST SIDES		
NO STOPPING - WEST SIDE		
EXISTING TRAFFIC ZONE "1"		
NEW METROPOLITAN TRAFFIC DISTRICT		

TECHNICAL COMMITTEE OF MAYORS A.T.P. COUNCIL

MARCH 1947

SAN FRANCISCO

PLATE 9

VIII ON-STREET PARKING: NO STOPPING AND TIME-LIMIT PARKING PLANS

Projects No. 10, 11, 12, 13, and 14

The primary purpose and function of streets is to move vehicles rather than store them. Therefore legal restrictions must be imposed to ensure that traffic can move as freely as the design of the streets permits.

1. No Stopping

To expedite the movement of evening peak-hour traffic on streets leading from the Central District, the Technical Committee recommends an extension of the no-stopping regulations between the hours of 7:30 a.m. and 9:30 a.m. and between the hours of 4 p.m. and 6 p.m. to certain additional streets within and leading from the Central Business District, as shown on Plate 9. Merchandise deliveries would be prohibited during those hours on "no stopping" streets.

2. Time-Limit Parking - Metropolitan Traffic District

The Technical Committee agrees upon the need for a rapid turn-over of parked cars in the limited curb spaces available in the central district. Such spaces should be reserved for the short-time parker, the shopper or visitor who can complete his tasks in a short period of time. The long-time parker in the central district of the City should use off-street facilities on the periphery if everyone is to be fairly served by available facilities.

The Technical Committee recommends the establishment by ordinance of a "Metropolitan Traffic District" in the central district of the City in which a maximum parking limit of one-hour should be established between 7 a.m. and 6 p.m. The limits of the district are shown on Plate 9.

Existing laws, ordinances, or resolutions setting forth a lesser parking time or non-parking or no-stopping time within the Metropolitan Traffic District would not be affected by the creation of the Metropolitan Traffic District as such.

Due to the vehicular congestion in the downtown area the Committee recommends the exclusion of moving horse-drawn vehicles between the hours of 7 a.m. and 7 p.m. of any day except Saturdays, Sundays and holidays in Traffic Zone No. I as such zone is defined in the Traffic Code.

The Technical Committee, further, endorses the use of parking meters as a means of aiding in the enforcement of time-limit parking regulations and increasing the turnover of available curb parking space.

3. Intersection Turning Program

The Technical Committee endorses the proposal to authorize the Police Department to temporarily prohibit left turns and right turns at particular intersections when unusual or temporary conditions require such action. It also endorses the permanent prohibition of left turns at particular intersections in the central district.

The Committee, in summary, recommends the following remedial program:

Project No. 10. No Stopping-No Parking Program

Enactment of legislation fixing a Metropolitan Traffic District and extending existing no-stopping and no-parking controls to most transit and vehicular streets in this district and fixing maximum parking limits on others.

Project No. 11. Intersection Turning Program

Enactment of legislation clarifying and amending existing intersection turning regulations.

Project No. 12. Angle Parking

Elimination of all angle parking, as the traffic code permits where such parking interferes with the smooth flow of transit and other vehicles.

Project No. 13. Parking Meters

Installation of parking meters in short-time curb parking spaces.

Project No. 14. Merchandise Delivery Program

Enactment of legislation requiring provision of off-street facilities for merchandise deliveries and parking in all buildings to be built or reconstructed. Also recommended is the establishment of a time delivery schedule by mutual agreement of shippers, receivers, and drivers, to avoid peak traffic congestion.

Drafts of the ordinances necessary to effectuate the above projects, and the immediate one-way street program, are attached hereto as Exhibits "A" through "H".

EXHIBIT "A"

Traffic Regulation. Defining Metropolitan Traffic District.

Bill No. _____

Ordinance No. _____

(Series of 1939)

An ordinance amending Article 1, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code) by adding thereto a new section defining the Metropolitan Traffic District.

Be it ordained by the People of the City and County of San Francisco as follows:

Section 1. Article 1, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code) is hereby amended by adding thereto section 3-a to read as follows:

Section 3-a. Metropolitan Traffic District Defined. The Metropolitan Traffic District shall be that portion of the City and County of San Francisco bounded as follows:

Commencing at a point where the westerly line of the Embarcadero intersects the southerly line of Townsend street; thence westerly along the southerly line of Townsend and Division streets to the westerly line of Eleventh street; thence northerly along the westerly line of Eleventh street to the southerly line of Harrison street; thence westerly along the southerly line of Harrison street to the westerly line of Thirteenth street; thence northerly along the westerly line of Thirteenth street to the southerly line of Duboce avenue; thence westerly along the southerly line of Duboce avenue to the northerly line of Market street; thence easterly along the northerly line of Market street to the westerly line of Gough street; thence northerly along the westerly line of Gough street to the northerly line of Pine street; thence easterly along the northerly line of Pine street to the westerly line of Taylor street; thence northerly along the westerly line of Taylor street to the northerly line of Sacramento street; thence easterly along the northerly line of Sacramento street to the westerly line of Powell street; thence northerly along the westerly line of Powell street to the northerly line of Broadway; thence easterly along the northerly line of Broadway; to the westerly line of the Embarcadero; thence southerly on the westerly line of the Embarcadero to the southerly line of Townsend street to the point of commencement.

EXHIBIT "B"

Traffic Regulations - "Parking Time Limited in Metropolitan Traffic District.

Resolution No. _____

(Series of 1939)

RESOLVED, that pursuant to Section 32, Article 3, Chapter 11, Part II of the San Francisco Municipal Code (Traffic Code), the following parking restrictions be and they are hereby adopted:

The operator of a vehicle shall not park such vehicle for longer than sixty (60) minutes within the "Metropolitan Traffic District" between the hours of 7 o'clock A.M. and 6 o'clock P.M. of any day.

The provisions of this Resolution shall not apply to Saturday after 12 o'clock noon, nor to Sundays and legal holidays.

The provisions of this Resolution as to time limit parking shall be subject to laws, ordinances, and resolutions of the Board of Supervisors, setting forth a lesser parking time, or "no parking" or "no stopping" within the boundaries of said "Metropolitan Traffic District".

EXHIBIT "C"

Traffic Regulations. No-Stopping Restrictions.

Resolution No. _____

(Series of 1939)

RESOLVED, that pursuant to section 32, Article 3, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code), the following stopping restrictions be and they are hereby adopted:

It shall be unlawful for the driver of any vehicle to stop the same, or permit the stopping thereof, between the hours of 4 p.m. and 6 p.m., Saturdays, Sundays and holidays excepted, on any of the following streets:

The word "stop", as used in this resolution, shall mean the stopping or standing of a vehicle, except: (1) in obedience to a traffic signal; (2) in obedience to the order of a police officer; (3) while the passenger in a vehicle is expeditiously alighting from the vehicle onto the sidewalk, including the time necessary in transferring the said passenger's personal baggage from said vehicle to the sidewalk; (4) while an intending passenger is expeditiously boarding a vehicle from the sidewalk, including the time necessary in transferring said passenger's personal baggage from the said sidewalk to the said vehicle.

Battery street, west side, from California street to Market street,
Bay street, north side, from Columbus avenue to Fillmore street,
Cervantes boulevard, northeast side from Fillmore street to Marina Boulevard,
California street, north side, from Market street to Franklin street,
Columbus avenue, northeast side, from Kearny street to Bay street,
Eleventh street, east side, from Bryant street to Market street,
Ellis street, north side, from Stockton street to Taylor street,
Fell street, north side, from Market street to Baker street,
First street, west side, from Market street to Folsom street,
First street, east side, from Market street to Mission street,
Front street, both sides, from Market street to Sacramento street,
Geary street, north side, from Market street to Van Ness avenue,
Golden Gate avenue, north side, from Taylor street to Divisadero street,
Harrison street, north side, from Third street to Tenth street,
Howard street, north side, from First street to Eleventh street,
Kearny street, both sides, from Market street to Columbus avenue,
Maiden lane, north side, from Kearny street to Grant avenue,
Market street, north side, from Embarcadero to Gough street,
Mission street, north side, from Embarcadero to Twelfth street,
Montgomery street, east side, from Washington street to Market street,
New Montgomery street, east side, from Market street to Howard street,
Pacific avenue, north side, from Columbus avenue to Van Ness avenue,
Pine street, both sides, from Market street to

Franklin street, Folk street, both sides, from Market street to Grove street, Post street, north side, from Market street to Divisadero street, Potrero avenue, west side, from Division and Tenth streets to Army street, Powell street, west side, from O'Farrell street to Market street, Sansome street, east side, from Market street to Washington street, Sixth street, both sides, from Market street to Harrison street, Stockton street, both sides, from Market street to the southerly entrance to the Stockton street tunnel, Sutter street, north side, from Market street to Van Ness avenue, Taylor street, both sides, from Market street to Post street, Tenth street, both sides, from Market street to Brannan street, Third street, both sides, from Market street to Bryant street, North Point street, north side, from Columbus avenue to Van Ness avenue, Van Ness avenue, west side, from North Point street to Bay street,

Any and all resolutions, or parts thereof, in conflict with the provisions thereof, are hereby repealed, but only to such extent as conflict may exist.

EXHIBIT "D"

Traffic Regulations. No Stopping on Bush Street.

Resolution No. _____

(Series of 1939)

Resolved, that pursuant to section 32, Article 3, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code), the following restrictions be and they are hereby adopted:

It shall be unlawful for the driver of any vehicle to stop the same, or permit the stopping thereof, between the hours of 7.30 a.m. and 9.50 a.m., Saturdays, Sundays and holidays excepted, on any of the following streets:

The word "stop", as used in this resolution, shall mean the stopping or standing of a vehicle, except: (1) in obedience to a traffic signal; (2) in obedience to the order of a police officer; (3) while the passenger in a vehicle is expeditiously alighting from the vehicle onto the sidewalk, including the time necessary in transferring the said passenger's personal baggage from said vehicle to the sidewalk; (4) while an intending passenger is expeditiously boarding a vehicle from the sidewalk, including the time necessary in transferring said passenger's personal baggage from the said sidewalk to the said vehicle.

Bush street, north side, from Leavenworth street to Market street.

Any and all resolutions, or parts thereof, in conflict with the provisions hereof, are hereby repealed, but only to such extent as conflict may exist.

EXHIBIT "E"

Amending Resolution No. 5498 (Series of 1939) - One-Way Streets - All Times" - by adding thereto those streets formerly designated "One-Way Streets - Part Time"; and rescinding Resolution No. 2257 (Series of 1939).

RESOLUTION NO. _____

(Series of 1939)

RESOLVED, that pursuant to section 30, Article 3, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code), the following streets are hereby designated "One-Way Streets - All Times" upon which it shall be unlawful at any time for the operator of any vehicle to drive said vehicle in any part of the following streets, except in the direction indicated herein:

Adler street, eastbound, between Grant avenue and Columbus avenue, Annie street, southbound, between Market street and Mission street, Battery street, southbound, between Market street and Broadway, Beale street, southbound, between Market street and Folsom street, Belden street, southbound, between Pine street and Bush street, Brosnan street, westbound, between Valencia street and Guerrero street, Bush street, eastbound, between Market street and Presidio avenue, Campton place, eastbound, between Stockton street and Grant avenue, Capp street, northbound, between Mission street and Twenty-Sixth street, Chesley street, southbound, between Harrison street and Bryant street, Clara street, westbound, between Fourth and sixth streets, Claude lane, southbound, between Bush street and Sutter street, Clay street, eastbound, between Embarcadero and Van Ness avenue, Clementina street, eastbound, between Beale street and First street, Clementina street, eastbound, between First street and Ninth street, Commercial street, westbound, between Embarcadero and Grant avenue, Darion way, eastbound, from Junipera Serra boulevard to San Fernando way, Davis street, southbound, between Broadway and Market street, Dearborn street, northbound, between Seventeenth and Eighteenth streets, Drumm street, northbound, between Market street and Pacific street, Ecker Street, southbound, from Market street to Mission street, Eddy street, westbound, between Market street and Van Ness avenue, First street, southbound, between Harrison street and Market street, Fremont street, northbound, between Market street and Folsom street, Guy place, westbound, Halleck street, westbound, between Front street and Leidesdorff street, Jackson street, westbound, between Powell street and Larkin street, Jackson street, eastbound, between Embarcadero and Montgomery street, Jessie street, eastbound, between First street and Ninth street, (except Jessie street, between New Montgomery street and a point 170 feet westerly of the westerly property line of New Montgomery street, which shall be open to the use of two-way traffic).

Kingston street, westbound, from Mission street to San Jose avenue, Lansing street, eastbound, Leidesdorff street, southbound, between Clay and Pine streets, Lexington street, southbound, between Sycamore street and Twenty-First street, Maiden lane, westbound, from Kearny street to Grant avenue, and eastbound, from Stockton street to Grant avenue, Main street, northbound, between Market street and Harrison street, Mary street, northbound, from Howard street to Mission street, Merchant street, westbound, between Front and Kearny streets, Minna street, westbound, between First street and Ninth street, Mint street, eastbound, between Jessie and Fifth streets, Montgomery street, southbound, from Market street to Washington street, Natoma street, eastbound, between First street and Ninth street, Natoma street, westbound, from First street to Fremont street, New Montgomery street, southbound, from Market street to Howard street, Oregon street, westbound, between the Embarcadero and Battery street, Pacific avenue, westbound, between Walnut street and Spruce street, Perry street, eastbound, between Third street and Harrison street, Pine street, westbound, between Market street and Presidio avenue, Flum street, westbound, from Mission street to Van Ness avenue, south Quincy street, southbound, between California street and Pine street, Sacramento street, westbound, from Embarcadero to Van Ness avenue, San Carlos street, northbound, from Twenty-First street to Sycamore street, Sansome street, northbound, from Market street to Broadway, Shipley street, eastbound, between Fourth street and Sixth street, Spear street, southbound, between Market street and Harrison street, Spring street, northbound, between Sacramento street and California street, St. Anne place, southbound, between California street and Pine street, Steuart street, northbound, from Market street to Howard street, Stevenson street, eastbound, between First street and Second street, and between Annie street and Ninth street, Tehama street, westbound, between First street and Ninth street, Trinity place, southbound, between Bush street and Sutter street, Turk street, eastbound, between Market street and Van Ness avenue, Washington street, eastbound, between Larkin street and Powell street, Washington street, westbound, between the Embarcadero and Montgomery street,

Any and all resolutions, or parts thereof, in conflict with the provisions hereof, are hereby repealed, but only to such extent as conflict may exist.

EXHIBIT "F"

Traffic Regulations. Prohibiting left and right hand turns.

Bill No. _____

Ordinance No. _____

(Series of 1939)

An ordinance amending section 34, Article 5, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code) by authorizing the Police Commission to prohibit left or right turns by police officers or signs.

Be it ordained by the People of the City and County of San Francisco as follows:

Section 1. Section 34, Article 5, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code) is hereby amended to read as follows:

Section 34. Left-hand and right-hand turns prohibited.

The Board of Supervisors shall designate by resolution, those street intersections where left-hand turns are to be at all times prohibited and it shall be unlawful for an operator to turn left at such intersections, provided the Police Commission erects, or causes to be erected, appropriate signs giving notice of such prohibition. To facilitate the movement of traffic, the Police Commission is hereby authorized to temporarily prohibit the making of a left turn or a right turn, or both turns, at any intersection where a police officer is directing traffic or where in the absence of a police officer clearly legible signs indicate said prohibition, and it shall be unlawful for any operator of a vehicle to make a "right" or "left" turn in disregard of the direction of said police, or the legible sign referred to.

EXHIBIT "C"

Traffic Regulations. Prohibiting left-hand turns on certain streets between certain hours.

Resolution No. _____

(Series of 1939)

RESOLVED, that pursuant to section 34, Article 3, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code), the following traffic regulations be and they are hereby adopted:

a) Except from the streets listed in this subdivision, the operator of a vehicle shall not, between the hours of 7.00 A.M. and 12 midnight of any day, Sundays and legal holidays excepted, make a left turn into any part of Market street between the easterly line of the Embarcadero and a prolongation of the easterly line of Eleventh street: Davis street, Fifth street, Fremont street, Grant avenue, Main street, O'Farrell street, Sansome street, Seventh street, Steuart street.

b) The operator of a vehicle shall not, between the hours of 7.00 o'clock A.M. and 6.00 o'clock P.M. of any day, Sundays and legal holidays excepted, make a left turn from the streets and as indicated in this subdivision: Ellis street into Stockton street; Geary street into Kearny street; Golden Gate avenue into Taylor street; Oak street into Van Ness avenue.

c) The operator of a vehicle shall not, between the hours of 7.00 o'clock A.M. and 6.00 o'clock P.M., of any day, Sundays and legal holidays excepted, make a left turn at any of the following intersections: Jessie and Fourth streets, Jessie and Fifth streets, Sixth and Stevenson streets, Sixth and Jessie street, Stevenson and Third streets, Stevenson and Fifth streets.

d) The operator of a vehicle shall not, between the hours of 4.30 o'clock P.M. and 6.30 o'clock P.M., make a left turn from Plum street into Mission street.

e) The operator of a vehicle shall not, between the hours of 7.00 o'clock A.M. and 12 midnight of any day, Sundays and legal holidays excepted, make a left turn from Market street between the easterly line of the Embarcadero and a prolongation of the easterly line of Eleventh street.

Signs shall be erected and maintained to give notice of the provisions of this resolution.

Any and all resolutions, or parts thereof, in conflict with the provisions thereof, are hereby repealed, but only to such extent as conflict may exist.

RESOLVED, that Resolution No. 3450 (Series of 1939) is hereby rescinded.

EXHIBIT "H"

Traffic Regulation. Prohibiting Horse Drawn Vehicles.

Bill No. _____

Ordinance No. _____

(Series of 1939)

An ordinance amending Article 5, Chapter XI, Part XI, of the San Francisco Municipal Code (Traffic Code) by adding thereto a new section prohibiting horse-drawn vehicles in Traffic Zone No. 1 between certain hours.

Be it ordained by the People of the City and County of San Francisco as follows:

Section 1, Article 5, Chapter XI, Part II, of the San Francisco Municipal Code (Traffic Code) is hereby amended by adding a new section known as section 89 to read as follows:

Section 89. It shall be unlawful for the operator of any horse-drawn vehicle to drive the same in Traffic Zone No. 1 between the hours of 7.00 A.M. and 7.00 P.M. of any day, excepting Saturdays, Sundays, and holidays.

IX THE STAGGERED WORKING HOURS PROGRAM

Project No. 15

Traffic and transit conditions today are such that no elaborate technical surveys and studies are required to determine that the capacity of San Francisco's streets is insufficient to care for the vehicle loads using the streets at 5 o'clock in the evening on week days. Similar conditions obtain in the morning, but to a lesser degree. Even elevators and sidewalk areas today are overcrowded during the evening peak hours.

During World War II a program of staggered working hours existed, partly through an established program and partly through working hours in industries being fixed on a shift basis. Since the end of the war all working hours have been revised, apparently without regard to the ability of workers to move to and from their work. Today the great mass of people working in the central area of San Francisco, both office and industrial employees, work from 8:00 A.M. to 5:00 P.M. from Monday through Friday. (No problem exists on Saturday because many crafts and industries do not work on that day.) This worker load plus a shopper load (accentuated by general 5:30 P.M. closing of stores) creates an acute peak-hour traffic problem. The efficiency of the transit system is reduced, privately driven automobiles cannot be accommodated on the streets, and essential transportation is delayed so that a highly overcrowded condition results each evening between 5 and 6 o'clock.

The integrated program recommended in this report will improve these conditions, but for the fullest realization of the benefits of the over-all program some form of a staggered working hours program should also be put into effect. The Committee therefore recommends the following program :

Project No. 15: The Staggered Working Hour Program.

1) That the Chamber of Commerce continue with renewed vigor the studies now in progress on a staggered working hours program. This work should be completed and put into effect at the earliest possible time.

2) If a complete scheduled staggered hours program is impossible of accomplishment, then a partial staggering of working hours should be placed in effect. To do this requests should be made for the changing of working hours voluntarily by the following:

- a) Insurance companies;
- b) Railroad companies;
- c) Other major employer groups;
- d) Labor unions;
- e) Merchandisers

(These particularly should extend their closing hour to 6:00 P.M.)

X THE STREET LIGHTING PROGRAM

Project No. 16

An essential part of major street improvement projects is the provision of adequate street lighting. Accident records show that a greater number of serious accidents per vehicle mile occur at night than during the day. Unless high visibility is maintained, the driver is generally uncertain of the limits, character and direction of the road. These facts were demonstrated in San Francisco by the considerably reduced accident rate resulting from the lighting in 1931 of Bay Shore Boulevard, constructed in the preceding year, and, conversely, by the large increase in night traffic accidents, despite reduced night driving, during the eighteen months of dimout ending November 1, 1943.

In its six-year program for postwar public improvements the Citizens' Postwar Planning Committee proposed in 1945 that approximately \$300,000 a year, in addition to the regular operating budget appropriation, be allocated in the annual budget to the Bureau of Light, Heat and Power for the construction of city-owned street lighting. The comparable figure in the budget of the City of Los Angeles is \$800,000 annually.

The Technical Committee recommends that the program advanced by the Citizens' Postwar Planning Committee be diligently pursued and that the following street lighting construction be accomplished in the 5-year period from June 30, 1946, to July 1, 1951. This construction program conforms to the program of street improvements proposed elsewhere in this report and is in addition to the lighting of major thoroughfares which is provided for in the major thoroughfare and street program recommended in Project No.1.

Following is a list of the individual projects proposed as a part of the overall Project No.16 recommended by the Technical Committee.

<u>Project</u>	<u>1946-47</u>	<u>Amount</u>
Misc.Construction and Emergency Replacements	\$	6,000
Army St. - Harrison St. to Guerrero St.		26,300
Guerrero St. - Market St. to Army St.		49,500
Guerrero St. and San Jose Ave. - Army St. to Randall St.		25,500
Third St. - Custer Ave. to Bay Shore Blvd		62,000
Clipper St. Extn. - Douglass St. to Portola Dr.		14,000
Fell St. - Baker St. to Stanyan St.		30,000
Sixth St. - Market St. to Townsend St.		24,000
Geary St. - Broderick St. to Masonic Ave.		24,000
Irving St. - 7th Ave. to 9th Ave.		8,000
Mission St. - Silver Ave. to Onondaga Ave.		38,000
Tenth St. - Market St. to Division St.		18,000
Fell St. - Market St. to Van Ness Avenue		4,000
Army St. - Bryant St. to Harrison St.		6,500

<u>Project</u>	<u>1946-47 (Cont.)</u>	<u>Amount</u>
GG Park Crossover Dr. & Bypass - Lincoln Way to Fulton	\$	10,500
Sloat Blvd. - Junipero Serra Blvd. to Gt. Highway . . .		19,000
Baker & Lyon Sts. - Lombard St. to Marina Blvd. . . .		20,000

1947-48

Misc. Construction and Emergency Replacements		6,000
Alemaný Blvd. - Sta. 36 to Mission Street		16,600
Alemaný Blvd. - Mission St. to San Jose Ave.		55,500
Mission St. - The Embarcadero to Beale St.		11,000
California St. - Market St. to Van Ness Ave.		70,500
California St. - 8th Ave. to 32nd Ave.		57,000
Third St. - Market St. to Mission St.		5,500
Monterey Blvd. - Ridgewood St. to San Anselmo Ave. . .		30,000
Second St. - Howard St. to Harrison St.		8,800
Harrison St. - The Embarcadero to 5th St.		16,000
Bryant St. - 2nd St. to 5th St.		8,000
Portola Dr. - St. Francis Circle to Claremont Blvd. .		25,000

1948-49

Misc. Construction and Emergency Replacements		6,000
Folsom St. - The Embarcadero to 10th St.		28,000
Geary Blvd. - Presidio Ave. to 42nd Ave.		105,600
Pt. Lobos Ave. - 41st Ave. to Great Highway		23,600
Junipero Serra Blvd. - Sloat Blvd. to County Line . .		42,200
Mission St. - South Van Ness Ave. to Army Street . .		90,000
Portola Drive - Claremont Blvd. to Evelyn Way		23,000

1949-50

Misc. Construction and Emergency Replacements		6,000
Lake Merced Blvd. (encircling Lake Merced)		97,000
19th Ave. Extn. - Sloat Blvd. to Junipero Serra Blvd .		20,000
Mission St. - Army Street to County Line		123,000
Anza St. - Masonic Ave. to Parker Ave.		12,400
Clarendon Ave. - Laguna Honda Blvd. to Twin Peaks Blvd		14,500
Eighth St. - Market St. to Division St.		24,000

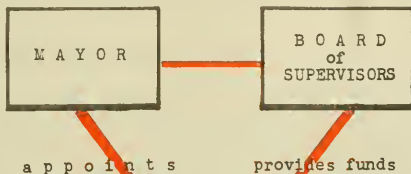
1950-51

Misc. Construction and Emergency Replacements		6,000
Golden Gate Park - Main Drive and Panhandle		62,000
California St. - Fillmore St. to Arguello Blvd. . . .		33,500
Hyde St. - Market St. to California St.		40,000
Geneva Ave. - Prague St. to County Line		10,500
Fillmore St. - Fulton St. to Broadway		51,000
Webster St. - Duboce Ave. to Broadway		59,000
Seventh St. - Market St. to Townsend St.		26,200
South Van Ness Ave. - Market St. to Howard St. . . .		7,200

1884

[illegible]

PERMANENT MAYOR'S A.T.P. COUNCIL AND TECHNICAL COORDINATING COMMITTEE



ADMINISTRATIVE TRANSPORTATION PLANNING COUNCIL				
UTILITIES COMMISSION	CITY PLANNING COMMISSION	CHIEF ADMIN. OFFICER	POLICE COMMISSION	OTHER COM.M'S AS NEEDED

TECHNICAL COORDINATING COMMITTEE *			
MANAGER of UTILITIES	DIRECTOR of PLANNING	DIRECTOR of PUBLIC WORKS	DEPUTY CHIEF of POLICE

TRANSIT, TRAFFIC AND PLANNING CONSULTANTS AS NEEDED
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UTILITIES COMMISSION STAFF	CITY PLANNING COMMISSION STAFF	DEPARTMENT OF WORKS STAFF	POLICE COMMISSION STAFF	OTHER COMM. STAFFS AS NEEDED
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- * ASSIGNMENTS: (1) To complete all sections of the comprehensive Transportation Plan for submission to Council, Mayor, and Board of Supervisors for adoption as official policy.
- (2) To coordinate all construction projects affecting transportation.

XI THE PROGRAM FOR COMPLETION OF THE TRANSPORTATION PLAN AND A PERMANENT A.T.P. COUNCIL AND TECHNICAL COORDINATING COMMITTEE

Results of Present Joint Study

The members of the Technical Committee are pleased to be able to report agreement on so many important projects. The discussions have been frank, and varying points of view have been expressed in an atmosphere of complete harmony of purpose and tolerant consideration. On a number of matters the discussions have enabled us to clarify and reconcile policies and to reach important decisions satisfactory to all Departments concerned. These had to do with the immediate construction program and also with the long-term plan, but as to the latter only to the extent necessary to assure the validity of the present recommendations.

No one familiar with the transportation problems which face this City, however, can fail to realize that the projects as a group, although important and obviously of high priority as to need, do not constitute by any means a complete solution. It has been taken for granted that more, much more, remains to be done, if San Francisco is to go forward.

If the Administrative Transportation Planning Council, created by the Mayor to meet a specific immediate problem of coordination, finds the accomplishments of the Technical Committee of value and is enabled in turn to make a joint recommendation at this time, it follows logically that the procedure adopted in the preparation of this program be made a permanent policy. Only in this way can a sound approach be made to the solution of the long-range transportation problems of the City.

Recommendations

It is recommended, therefore, that:

1. The Mayor establish the ATP Council on a permanent basis with provision for regular meetings and, if this is done, that-
2. The Council instruct its Technical Committee, in turn, to organize itself on a permanent basis, and to carry out immediately the following two tasks:
 - a. Complete the Transportation Plan upon which so much progress has been made during the present joint study. This will mean continued close collaboration between the technical staffs of the departments concerned and the employment, as needed, of recognized transit, traffic, and planning authorities to assure sound and unanimous decisions on the major elements of the long range features of the final plan. A description of the work still

to be done and the method of financing it is described below.

- b. Coordinate all construction programs affecting transportation, including both current and proposed bond issue projects. In this way it will be possible to secure maximum efficiency in scheduling, for example, (1) abandonment of street car lines (by Public Utilities Commission), (2) removal of tracks and reconstruction of streets (by Department of Public Works), and (3) installation of modern synchronized traffic signals and new one-way streets (by Police Commission and Department of Public Works). The Technical Committee can furnish, if requested, numerous other illustrations of the need for, and value of, continuous coordinated planning and programming.

Completion of the Transportation Plan

1. The Market Street Problem: The Technical Committee recognized that it may be some time before the people of the City accept what the Committee itself takes as a fact, the necessity of subways for mass transit vehicles in the downtown area. This was the most important reason for screening out from the proposed bond issue all those projects that might ultimately be unnecessary or might adversely affect either of the only two possible suggested long-range solutions of the downtown traffic and transit problem. This has been carefully done and any discussion here of the alternate long-range solutions (1) subsurface transit routes or (2) elevated automobile ways in the downtown area - cannot properly be used by anyone as a basis for questioning the absolute need for and desirability of ALL of the proposed immediate bond issue projects. These are all needed NOW, regardless of the ultimate solution of the Market Street Problem.

The Committee's first job as a permanent planning and coordinating agency will be to further substantiate its belief in the need for subsurface routes for mass transit vehicles in the downtown area, if such substantiation is deemed necessary by the Council. The Technical Committee is unanimously convinced that the so-called "Alternate solution" - a system of elevated vehicular freeways in the downtown area - will not work. The reasons for this conviction are stated in Section Two, Part I of this report.

If, however, the Council accepts the Committee's advice on this all-important matter, the Committee's

first job then would be to develop an agreed subway plan showing routes, types of vehicles to be used, types of construction required, and methods of coordinating the subsurface rapid transit system with the surface transit system, the major thoroughfare system and the present and ultimate rapid transit system for the metropolitan Bay Area. In preparing this element of the comprehensive Transportation Plan the Committee will make use of the best consultants available. But the responsibility for preparing an agreed plan for submission to the Council will be the Committee's, not that of any individual consultant.

2. Other Elements of the Plan: While work on the above task is progressing, the Committee will proceed as rapidly as possible to develop the details of other elements of the Plan. These will include plans for:
 - a. Freeway approaches to the Second Bay Crossing including the Embarcadero Freeway extending from Army Street along the waterfront to Van Ness Avenue and Lombard Street;
 - b. Distribution facilities needed in connection with the Bayshore Freeway now being built and with the existing Bay Bridge;
 - c. Extension of the one-way street system;
 - d. The combined interurban bus terminal and free-way-parking loop between Minna and Natoma Streets, together with other off-street parking facilities;
 - e. Transportation facilities required in connection with urban redevelopment projects.

In developing final plans for some of these projects it will be necessary to employ special consultants so that the City may have expert advice in certain highly specialized fields. In so doing, it is desirable to avoid the mistake, frequently made in the past here and elsewhere, of employing such men to make independent investigations and to receive their fee for a report which is detached from the realities of the problem as understood by the departments concerned. Such reports are all too often, and perhaps rightly, disregarded as instruments of official policy. To avoid these costly mistakes such consultants will be employed as needed expressly for the purpose of advising the Technical Committee on specific phases of its official studies. Full responsibility for the preparation of an agreed plan for submission to the Council will rest with the Committee.

Method of Financing Preparation of the Plan

After reaching agreement on the need for establishing the Council and Technical Committee on a permanent basis, methods of financing the work necessary to complete the Transportation Plan were considered. The members of the Committee agreed unanimously to instruct the Director of Planning to request the City Planning Commission to include in its proposed budget for 1947-48 a sum of \$200,000 for this purpose. The Committee strongly urges the Council to recommend to the Mayor that he approve this budget request of the City Planning Commission, and to support the request vigorously before the Board of Supervisors at the budget hearings to be held in the next few weeks.

The City Planning Commission, in submitting its request for \$200,000 for the purpose described above, has agreed to act as disbursing agent for the Council and its Technical Committee. It would not use any of these funds for its own work. If the Council and Committee are not continued, the money will not be sought by the Planning Commission. Unified, co-operative planning is the only answer to the complex transportation problem of San Francisco. At last, full agreement has been reached on a method for developing a comprehensive Transportation Plan that can readily be put into effect. By approving the \$200,000 budget request of the City Planning Commission, the Mayor and Board of Supervisors will be providing the means for effective action.

